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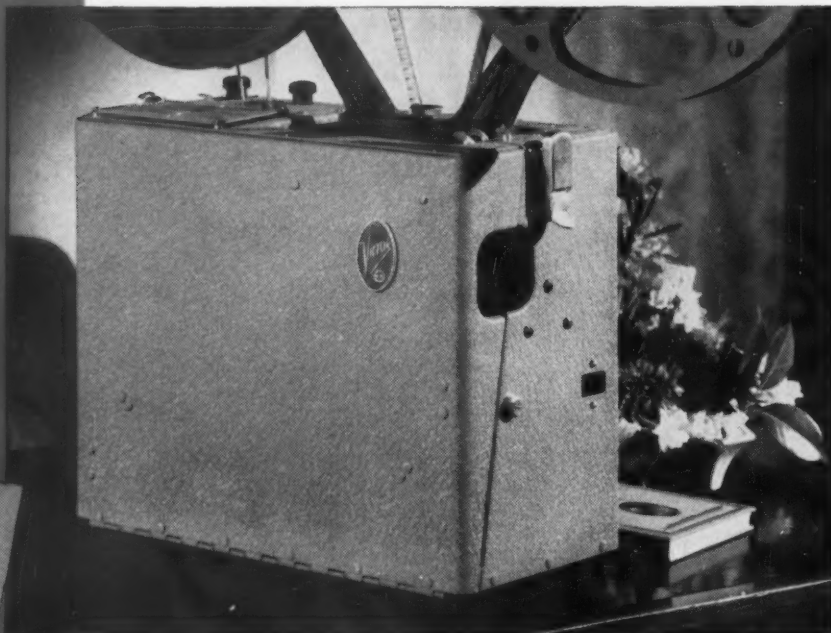


The Nation's Schools

AUGUST 1949

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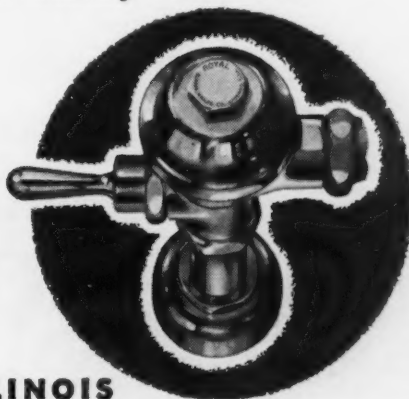
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AMONG THE AUTHORS



E. T. McSwain

Although he is dean of University College at Northwestern University, Chicago, E. T. McSWAIN's deep and abiding interest is in elementary education. Administrative responsibility over the whole range of public education lends authority to his analysis of priorities in education on page 21. He was a principal and superintendent in North Carolina, then an assistant at Columbia University before going to Northwestern in 1935. In addition to administration responsibility on the Chicago campus, Dr. McSwain is professor of education and also director of the summer session on the Evanston campus. He is directing a three-year study in parent-teacher leadership for the National Congress of Parents and Teachers.

HOBART H. SOMMERS, whose article on music in the complete education program appears on page 24, is the new assistant superintendent in charge of vocational education for the Chicago public schools. A native Chicagoan, Dr. Sommers began his teaching career in that city's schools as an auto shop and woodshop instructor at Lane Technical High School. He has been principal of Chase and McPherson elementary schools and of Austin High School.



H. H. Sommers

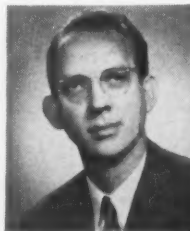


W. S. Elsbree

WILLARD S. ELSBREE, who writes about personnel practices on page 29, has been a member of the faculty of Teachers College, Columbia University, since 1929. He now is professor of education and executive officer of the Institute of Field Studies. Dr. Elsbree has served as consultant on teacher salary scheduling and teacher personnel problems for various communities throughout the United States. He is advisory consultant on teacher salary scheduling for the federal Office of Education and the New York State Department of Education. Under his direction the Institute of Field Studies has surveyed the schools at Great Neck, N.Y.; Montclair, N.J.; Worcester, Mass.; Bellmore, N.Y., and Union, N.J.

MARY M. MANEVAL, teacher of sociology and government at Norristown, Pa., sponsors the assembly programs she describes so well on page 26. Miss Maneval is putting in a heavy summer writing her dissertation for the doctorate she hopes to get from the University of Michigan. Her head and hands are engaged, but her heart is in the mountains where she usually vacations. When she isn't teaching, studying or traveling, Miss Maneval may often be found

out collecting antiques, especially vases; she also collects, and tries, recipes. And she likes to golf.



Alexander Frazier

ALEXANDER FRAZIER, who "wants to see a good high school," (page 31) is curriculum consultant for the Phoenix Union High Schools and Phoenix College in Arizona. He formerly taught English, social studies and journalism at those schools and then spent two years as curriculum coordinator for the Los Angeles County schools, returning to accept his present position in 1947. Mr. Frazier is president of the Arizona Association for Supervision and Curriculum Development.

J. C. MOFFITT, who discusses Supreme Court decisions on education on page 55, has been superintendent of schools at Provo, Utah, since 1937. Previously he had been elementary school principal, director of research, and high school principal in that town. Dr. Moffitt has written numerous articles, most of them dealing with various aspects of education in Utah and with the lives of early Utah educators.



J. C. Moffitt



Roy W. Davis

ROY W. DAVIS tells on page 50 how Atlanta, Ga., is using its high schools as community centers. Mr. Davis has been assistant superintendent in charge of high schools at Atlanta since 1944. Before that time he was an instructor in history at Joe Brown Junior High School, held a similar position at Boys High School, and was principal of Hoke Smith Junior High School, all in Atlanta. He received his A.B. and M.A. degrees from Mercer University, Macon, Ga. Mr. Davis is a member of the Y.M.C.A. boys' committee and of the Atlanta area council of the boy scouts.

Because he is deeply concerned about the way many schools misuse educational films, CHARLES J. DINTELMAN has written an article (page 53) explaining a planned film program that works. Mr. Dintelman is superintendent of Community Unit District No. 321, Winnebago County, Illinois. Formerly he was a teacher and assistant high school principal at Highland, Ill., and high school principal and superintendent at Fulton, Ill. His hobbies are music, gardening and travel.

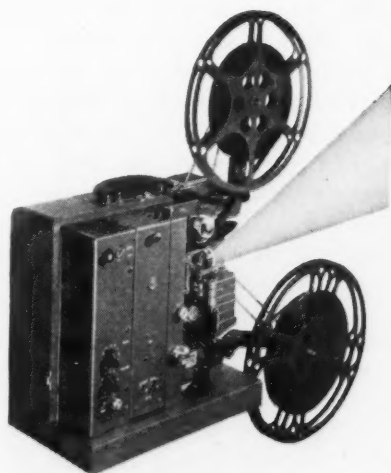


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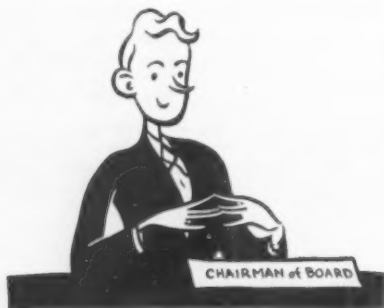
Banquet Planned and Served by Grade School Pupils . . . High School Students Hold Top Factory Jobs for Day . . . Stunts Aid C.A.R.E. . . . Long Canoe Trip for Swimming Team . . . Citizens' Committee Earns Permanent Status

WHEN the seventh graders at Enterprise School, south of Wichita, Kan., entertained the eighth graders at a banquet this spring, their teachers were present but only as guests—the pupils themselves planned the banquet and did all the necessary work.

The meal—a real banquet—was cooked by the seventh and eighth graders' mothers and served by sixth graders. The hosts decorated the school lunchroom and the tables; at each place were a place card and a small booklet containing a menu and the names of the seventh and eighth graders. The parents of the children in the two grades also were guests.

RESPONSIBLE positions, from chairman of the board to clerk, in the Johnson & Johnson corporation, New Brunswick, N.J., were given to some 300 high school students for one day this spring.

Purpose of the "Day in Modern Industry" was to give the boys and girls a chance to try the kind of work in which they think they are inter-



ested and so to help them choose their careers. It also gave the students an opportunity to see a large American business from the inside.

Representatives of the company's personnel department told seniors at

New Brunswick and St. Peter's high schools about the jobs at the plant, where surgical dressings are made. Each interested girl and boy indicated on a card a first and second choice for a job.

The students worked in the engineering research laboratories, the technical services laboratory, the maintenance division, and the accounting department, as stenographers. Most of the 300 were given the jobs they listed as their first choices.

The company plans to make "A Day in Modern Industry" an annual affair.

TO EARN money to send C.A.R.E. packages abroad, pupils in the J. Enos Ray School, Takoma Park, Md., held candy and cookie sales, sold rides on a pony, and staged a hobby show and a carnival. With the 12 packages the boys and girls sent letters to their new friends in other countries.

THE schools at Battle Creek, Mich., needed money for teachers' salaries, for repair of school buildings, and for teaching equipment. But no arguments impressed the town's appropriations committee until the school administrators invited its members to see the schools for themselves.

A special committee made an investigation and then started a community-wide campaign to get more money for the schools. A citizens' committee of 60 was appointed to make a complete survey of the school system; its report covered immediate and future needs.

Newspaper and radio people and volunteer speakers at club meetings helped to tell the story. Men who formerly had opposed a tax increase bought radio and newspaper space to

urge higher real estate taxes to support the schools more adequately.

Now a permanent citizens' committee has been formed to work for the welfare of the Battle Creek schools.

A VACATION program that began with plans for a week-end fishing trip in 1946 developed into a 12 day canoe trip into the Canadian wilderness last summer.

Members of the swimming team at Roosevelt High School, Virginia,



Minn., and their coach talked about the week-end trip in June 1946 but finally decided to make a week's canoe trip into the Superior National Forest. In 1947 six state swimmers, their coach, and a teacher went into Canada on a canoe trip.

The next year eight swimmers, their coach, and a teacher traveled 150 miles over Canadian lakes by canoe. The boys carried much of their food with them and also caught fish. Their "pancake man" estimated that he served 500 pancakes to the hungry gang. The canoeists carried tents as part of their equipment.

This year eight members of Virginia's high school faculty planned a canoe trip into Canada.

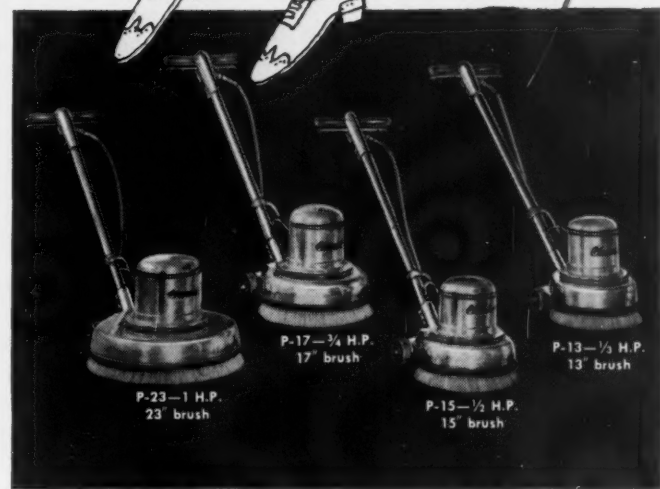
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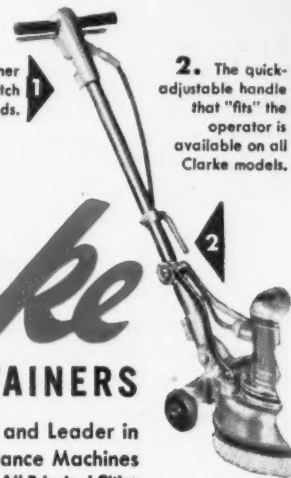


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Questions and Answers

Business Manager

What relation does the business manager have to the board and superintendent?—J.H.Q., Ill.

The business manager of a school system is responsible to the board of education *through* the superintendent of schools. Responsibilities assigned to him may include financial accounting, purchasing and distribution, maintenance and capital improvement of buildings and grounds, transportation, cafeteria services, and nonprofessional personnel. These responsibilities as assigned are met within limits set by administrative code, board action, and direction of the superintendent.

The manager is a service agent. Like the estate manager who makes possible the kind of life desired on the estate; like the hospital business manager who handles accounts and provides physical conditions, supplies, equipment and service so that the work of the professionals may be accomplished most effectively, the school business manager strives to make the educational service of the professionals effective.

With their help he studies and experiments to provide completely and economically the physical conditions, supplies and equipment which will make the instructional program most effective. He has reports readily available for cost analysis, for relative effectiveness, for budget planning, and for prudential auditing. He helps word budget justifications and explains business procedures.

Needless to say, he should have an educational background with additional business training. If he has only business training, he should seek formal course work in education or in-service training in education under the direction of the superintendent. If his business experience has been that of proprietor-operator, he must clearly understand the distinction between being boss-owner and being agent with technical business competency and judgment to make effective the work of the school. He must realize

that school budgets are set up to be expended wisely and without patronage.—VAN MILLER, *associate professor of education, University of Illinois.*

Use of Facilities

What can we do to convince the public that there must be some restriction on the use of school facilities? When local groups have outside entertainers, we make a small charge for use of the auditorium to cover cost of lights, janitor service, and heat. These groups get a percentage of door receipts, but yet they object to our fee.—L.V.M., S.C.

This is a recurring and continuing problem. Perhaps some good public relations through publicity or a small pamphlet explaining why such charges are necessary would serve to enlighten the public.

Money for building school buildings and operating the school plant is appropriated out of public revenues. Good business administration in expending those appropriations demands that money be used for the purpose for which it was appropriated.

If the governing body appropriates money to cover the cost of maintenance and operation for purposes other than regular school activities, then those responsible for administering school funds would obviously be fully justified in permitting the use of the building for such purposes.

In the absence of such special appropriations, those responsible for administering school funds must necessarily, in the interest of good business administration, make a charge to cover the cost for operation and maintenance.—RAYMOND V. LONG, *director, state planning board, Virginia State Board of Education.*

Teacher Training

How may the teacher training program be improved for high school teachers?—C.E.S., S.D.

I am sure that administrators in general would like very much to see an improvement in the training program

for high school teachers. There are evidences of improved curriculums and methods in colleges here and there, but much more needs to be done. Many of the city systems are doing what they can to offer in-service training by encouraging teachers to enroll in extension courses and in summer school; through observation lessons in the various subject matter fields; through workshops held either during the school year or during the summer department meetings and general faculty meetings.

Some of us feel that great improvement would result if there could be better training of the cadet teacher on the job. This would mean more time given by members of the college staff to supervising the classroom work of the cadet. Too often the cadet is left to flounder by himself with infrequent advice and conferences.

It also would help, we feel sure, if more courses were offered on the secondary level in how to teach the various subjects. True, we want teachers who are well grounded in English, science, mathematics or whatever field they happen to be most interested in, but they should also have much help in learning the best way to impart this knowledge to students.—T. MALCOLM BROWN, *director of secondary education, San Diego, Calif.*

Discipline Problems

How can you help a teacher who has discipline problems to see that it is not entirely the fault of the students?—A.A.K., Mich.

If a teacher has severe discipline problems in group after group and year after year, there probably isn't much you can do. The teacher is lacking in resourcefulness and other teaching traits. Another career is indicated.

But if there are real elements of strength and a real desire to improve the situation, then the point isn't to prove anything except that the teacher can handle matters. Can you get the teacher, either through conference or (better) through visiting other class-

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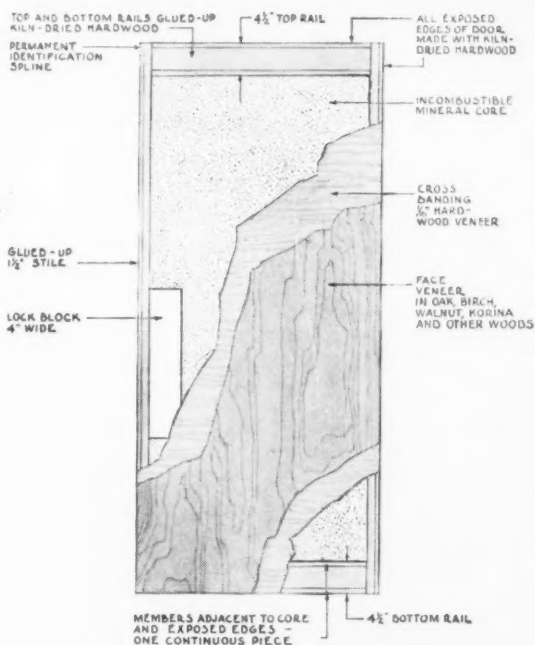
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rooms, to study out some of the elements of control? I think of these as useful cues:

1. Less teacher talk.
2. More teacher smile.
3. More teacher preparation.
4. More visual material, including blackboard and charts.
5. No harangues to class on behavior problems; no threats; no ultimatums.

6. Occasional quiet detachment of a child after school for a positive comment on behavior ("I shall expect . . . " "I know you want . . ."); no long lecture, no arguments, no pleading, but perhaps "Maybe I've been wrong." No "detention" beyond three minutes.

7. Occasional reseating of a group, with no reason announced. No matter what the group, group psychology is changed by physical rearrangement.

8. More praise of children, especially of those who don't get much praise. Try a little note slipped into the palm of a youngster, "You did *very well* today," or "I like your new dress." These actions will make lifelong friends.

9. More provision for physical activity.

10. More reading aloud to the class; more special days.

Is the teacher a perfectionist? A nasty neat housekeeper? The kind who expects perfect obedience? Who is not aware of children's need for activity but only of her own for quiet and conformity? There is little hope for such teachers unless you can lead them to see that progress should be measured not from day to day but only from year to year.

But maybe you're the one at fault. Are you setting up impossible standards for the teacher? Is she scared of you and is projecting her fears into the classroom? What have you done to remove tensions that lie within your control? Talk it over with her. If you aren't afraid to lose face, you won't.—JAMES M. SPINNING, *superintendent, Rochester, N.Y.*

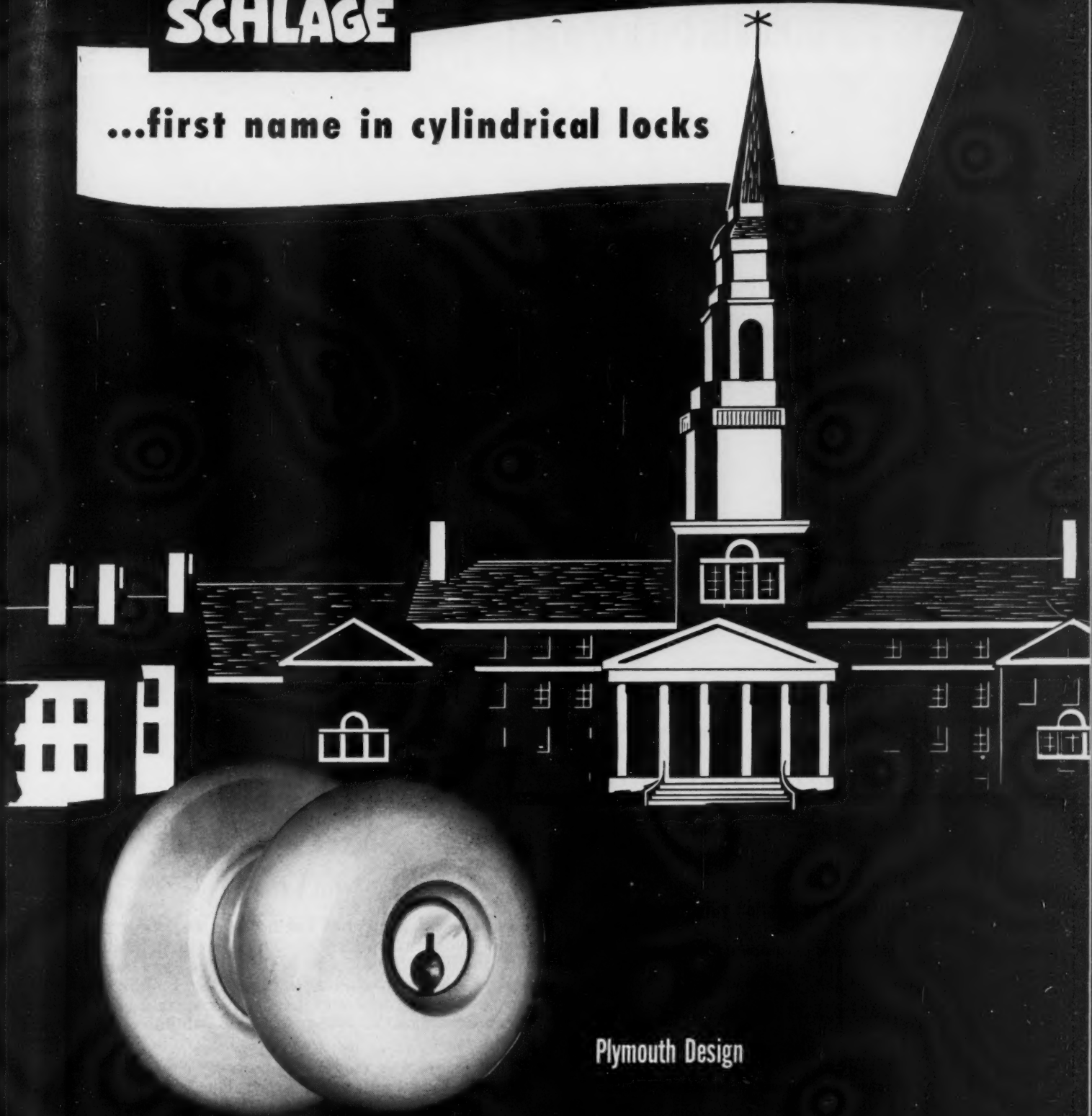
Student Morale

What methods can be used to create desirable student morale?—M.E.C., Tex.

The same friendly, inspiring, up-building leadership required to create faculty morale will also create good student morale.—ARVID J. BURKE, *director of studies, New York State Teachers Association.*

SCHLAGE

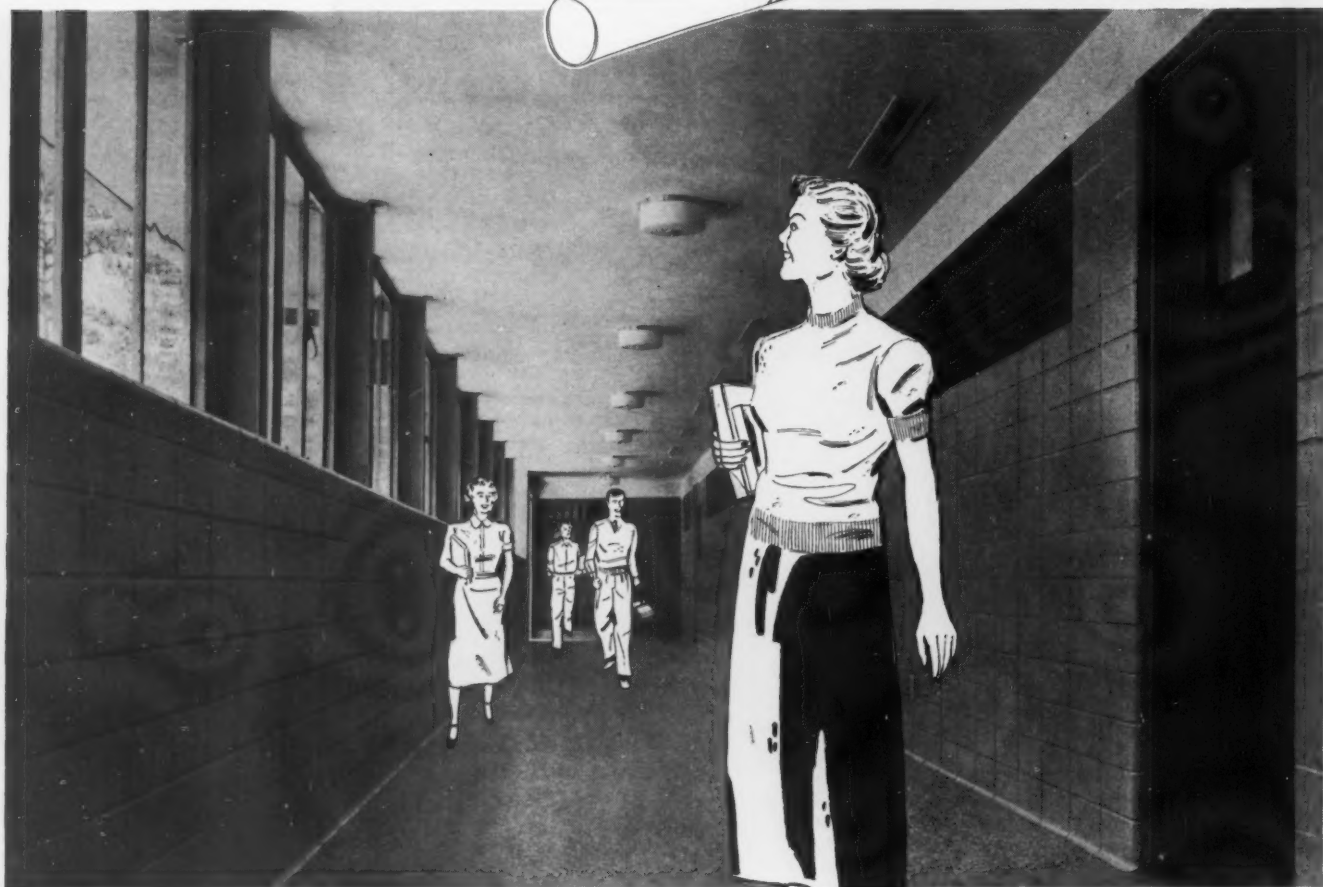
...first name in cylindrical locks



Plymouth Design

SCHLAGE

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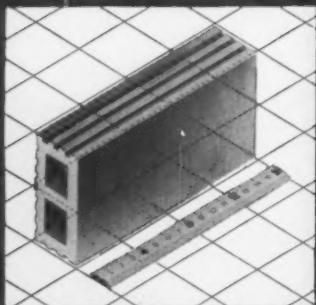


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Natco Glazed Structural Facing Tile (Block bond—8-w series) in corridor of St. Theresa School, Houston, Texas. Goleman & Rolfe, Architects; Fretz Construction Co., Contractor; Natco Tile supplied by Acme Brick Company.

Tile and 16 inch ruler are laid below on grids made up of 4 inch squares. The 4 inch module unit of measure is the basis of modular coordination for all building materials and equipment.



Natco Glazed Structural Facing Tile walls are ideal for school interiors . . . they are bright, architecturally beautiful, resistant to wear and hard service, and remain unmarked and unmarred as long as the building stands. Simple cleaning now and then with soap and water is all the maintenance that is required—no painting—no repairs ever needed.

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Crane provides extra health safeguards to protect your students. Drinking fountains are designed to prevent any possible contamination. Shown: the C-9268 Corridor Fountain.



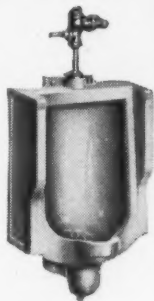
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To renew one of these Dial-ese faucets, you merely slip out the old cartridge unit, slip in the new. One unit fits all Crane faucets. Shown: the 1-135 Oxford Lavatory.



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It is easy with wall-mounted toilets like this one. Once over with a damp cloth, and Crane school fixtures shine like new. Shown: the 3-468 Lowall Closet.



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Crane builds this extra strength into a complete line of Crane school plumbing—fixtures of a type and size for students of any age. For full details, see your Crane Branch, Crane Wholesaler, or Plumbing Contractor, whether you plan a new installation or the modernizing of your present facilities.

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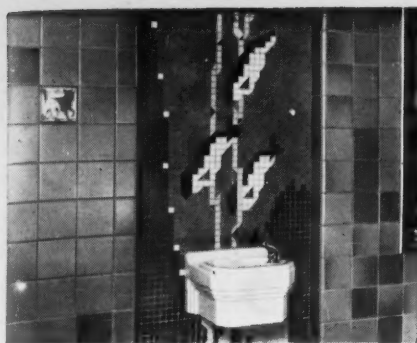
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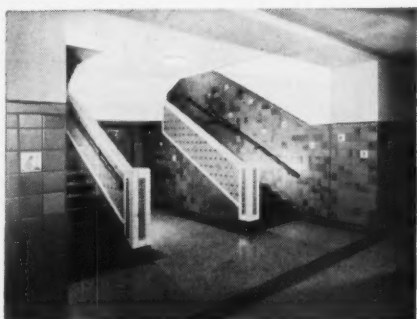
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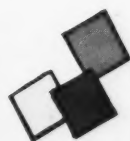


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Warren S. Holmes, Architect



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TODAY you can install beautiful MOSAIC tile at less cost than ever before—with MOSAIC's fast, economical Lockart Method! This process permits *direct application* of tile right over plaster, brick, metal, concrete or plaster wall-board. No metal lath or scratchcoat is required. There's no dirt—no mess. You save time, money, labor. Applica-

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MOSAIC's line of ceramic tile modernizes bathrooms, rest rooms, kitchens, corridors, lobbies, etc.; gives you beauty that doesn't fade or need renewing . . . years of heavy use without upkeep cost. These fresh, glowing colors are Mosaic's remarkable, new **HARMONITONE** line . . .

GLAZED WALL TILE Sizes: $4\frac{1}{4}'' \times 4\frac{1}{4}''$, $6'' \times 6''$, $6'' \times 3''$

101	121	141	161	181	201	221	241	261	281	301	304
102	122	142	162	182	202	222	242	262	282	302	244
103	123	143	163	183	203	223	243	263	283	303	104

UNGLAZED CERAMIC MOSAIC FLOOR TILE finished in usual ceramic mosaic sizes—pasted 2 sq. ft. to the sheet

10 light	12 light	14 light	16 light	18 light	20 light	22 light	24 light	26 light	28 light	30 light	Red
10 dark	12 dark	14 dark	16 dark	18 dark	20 dark	22 dark	24 dark	26 dark	28 dark	30 dark	Chocolate



USE YOUR SCISSORS

to cut out these Mosaic colors in horizontal strips. Then arrange the colors to suit your decorative plans.

The new **HARMONITONE** line is 36 related colors of glazed wall tile, *color-coordinated* with 24 unglazed floor tile colors—all chosen to harmonize with each other to provide a color range in tile never before available.

For more details on the Lockart Method . . . the new **HARMONITONE** line . . . other Mosaic products and for design help, consult the Mosaic dealer nearest you,

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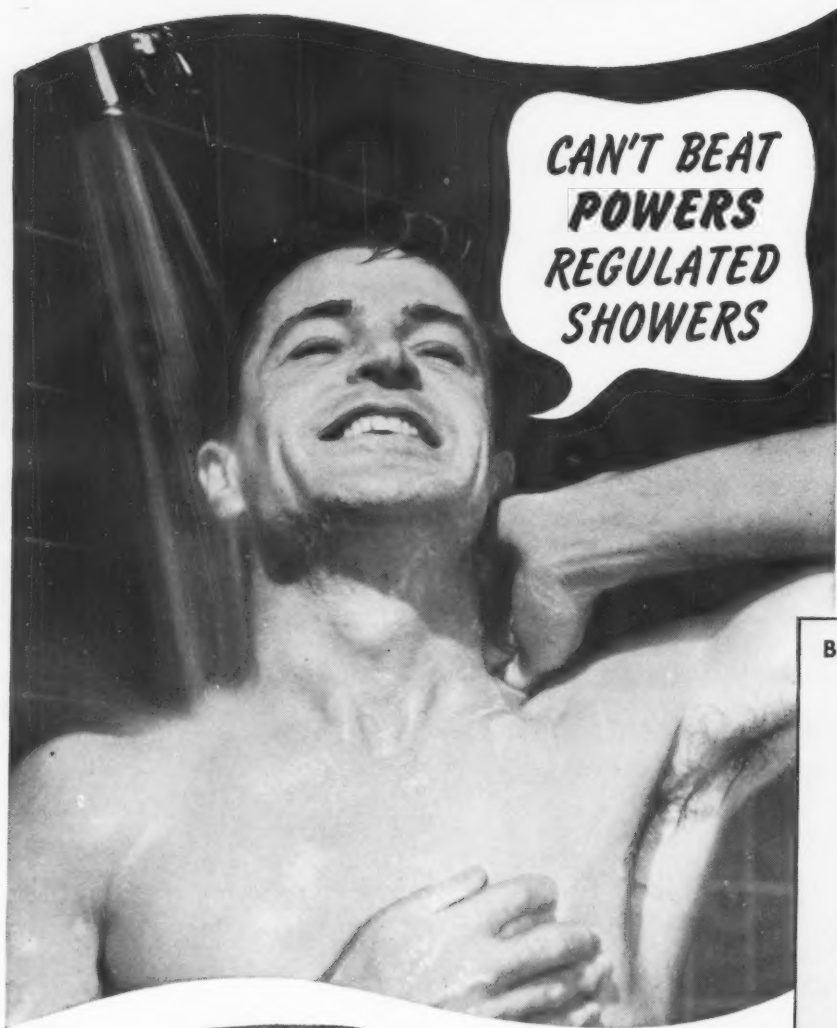
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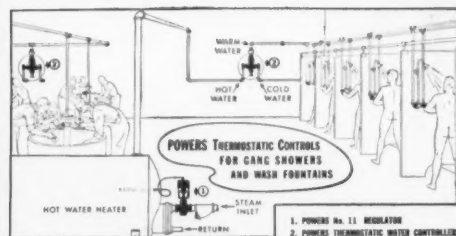
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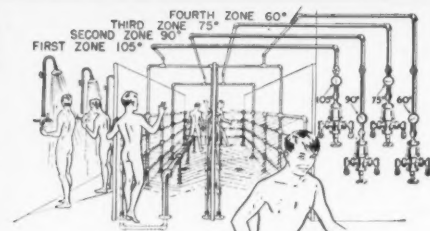
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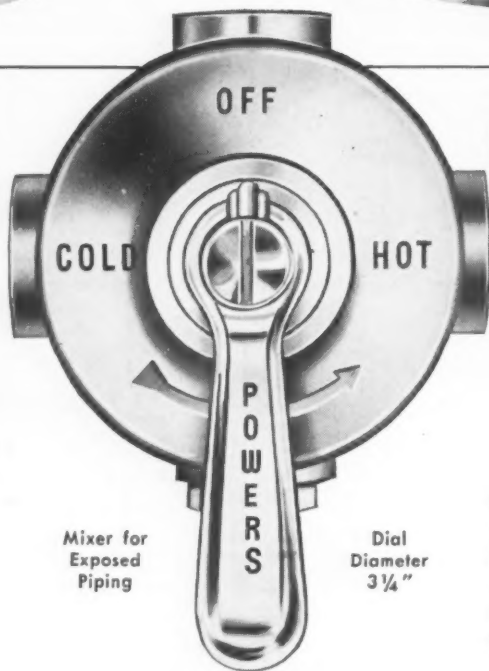


Zone Showers for Swimming Pool

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6" diam. dial.



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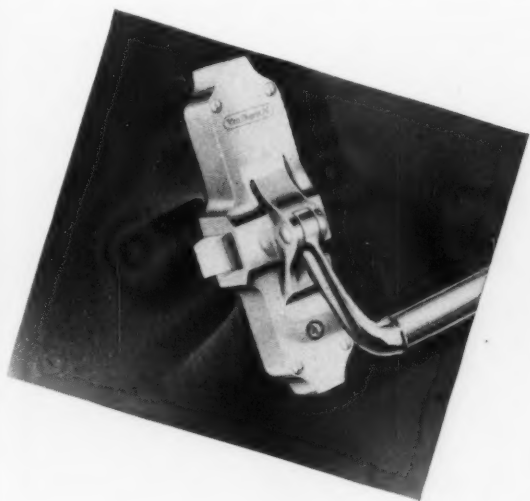
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Comfortable, healthful air conditions can be obtained most effectively in the classroom by installing Herman Nelson Unit Ventilators. These scientifically-designed units "bring the outdoors indoors", preventing overheating through the controlled introduction of outdoor air.

The mental and physical well-being of our children cannot be measured in dollars and cents . . . yet, installation and maintenance costs of providing healthful air conditions in schoolrooms with Herman Nelson Unit Ventilators is amazingly low.



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Looking Forward

It IS Alarming!

THE low qualifications of those now teaching is the most alarming fact in the entire study of education by the Council of State Governments. This is the opinion of Francis S. Chase, who directed the recent survey of the 48 state school systems.

"We found the lowest qualifications in states where there are so many small school districts. Conversely, the better trained teachers are found in states paying better salaries and having a greater number of large units of administration. There also seems to be a proportionately larger number of better trained teachers in the Southwest. It must be the atmosphere there!"

The published report shows that more than one-eighth (110,000) of all the teachers employed in the 48 states have had less than two years of college preparation for teaching. Iowa leads the list with 51 per cent in this classification. Mississippi and South Dakota are close to this record with 47.8 per cent. In three other states, North Dakota, Nebraska and Kansas, more than a third of all of those persons who are now instructing the youths in the public schools have had less than two years of college training.

The darkest picture is in North Dakota and Mississippi where 32.3 per cent and 23.5 per cent, respectively, of all the teachers have had absolutely no college preparation for the teaching profession. States the survey:

"Reports from several states indicate that requirements are lowest for rural elementary schools, especially for one-teacher schools. For example, Missouri specifies only eight semester hours of college preparation for an approved rural school, but the requirement jumps to 60 semester hours for an elementary school in a high school district and to 120 for an elementary school where combined with a high school. Yet if a distinction is to be made, it would seem more logical to insist on higher standards for teachers responsible for instruction of several grades in isolated areas where they often are without benefit of supervision or much in the way of teaching aids.

"The toleration of these low standards may spring from a belief that not much formal education is required for teaching young children. Such a belief does not square with the findings of psychology in regard to the importance of early childhood learning or with what is known about the kinds of competence needed by elementary school teachers Four years beyond high school are little enough to acquire the mental and emotional equipment

needed by teachers of young children or for teachers of any age group."

Setting a better example are eight other states in which more than 70 per cent of the teachers have had four or more years of college preparation. Leading the list is Arizona with 85 per cent, followed by Oklahoma, Texas, California, Utah, Nevada, North Carolina and Florida. Another six states barely missed the 70 per cent mark. They are Ohio, New Mexico, Michigan, Delaware, Maryland and New York.

California sets a record which no other state approaches for the number of teachers having five years or more of college education. More than half of the teachers (52 per cent) have masters' or higher degrees. Next in line is Arizona with about one-fourth of the teachers having the equivalent of five years of college preparation.

The corollary between good salaries and high qualifications of teachers is evident in the data on average annual salaries for 1947-48. New York State leads with an average of \$3450, followed by California with \$3400, while at the end of the list is Mississippi with an average of \$1293, preceded by Arkansas (\$1548) and North Dakota (\$1573). Over a period of 10 years, the relative position of New York and Mississippi has not changed in this ranking of average annual salaries for teachers.

Nevada and Washington join California as a trio of states in which *no* teacher receives *less* than \$2400 annual salary. One-third of all the teachers in New York and one-fourth of the total number in California receive salaries *above* \$4000.

"Most of the states with excessively high percentages of teachers in the lower salary brackets are either southern states where the incomes per school-age child are low, or states where there are large numbers of extremely small school districts," states the report. Its findings verify earlier evidence that the poorest paid individuals are the rural and elementary teachers in the smaller school districts—the same group that ranks lowest in college preparation.

The shortage of elementary teachers is not difficult to understand, in light of the low standards of preparation set up by many states and the extremely low compensation for teachers in this field. And yet the vicious circle continues, with many teacher educating institutions graduating more high school teachers than needed and from one-half to one-fourth enough teachers to fill vacancies in the elementary schools. This vicious situation is perpetuating the practice in a number of states of granting so-called temporary certificates for elementary teachers.

What this Council of State Governments' report has revealed concerning qualifications and salaries for teaching personnel is only a sample of the scope of the survey. Its findings are equally significant in areas of finance, organization and administration.

As the first study of education ever to be conducted by an agency of all the states, its great value results partly from the fact that data were obtained and were checked and rechecked under circumstances not possible for other research organizations. But even under this official sponsorship, the study could be no better than the information furnished by the various state agencies. In several instances the council was unable to obtain accurate and timely data for comparative purposes.

Although it is the most comprehensive and up-to-date survey ever made of education in the 48 states, the report itself directs attention to failure of public education to establish an adequate system of statistical recording. It lists as one of the most serious weaknesses in state school agencies the "lack of needed research and records as a basis for determining educational policy and procedures."

Merely Misanthropy?

THE learned doctor from Laputa who invented a machine to create all knowledge would find much to please him in this country today. He would be delighted to roam through public libraries to see thousands of volumes of stored knowledge that has been manufactured somewhat according to his theory but without benefit of his unique contraption.

To quote the professor correctly, his machine was "a project for improving speculative knowledge by practical and mechanical operation. By his contrivance, the most ignorant person, at a reasonable charge and with a little bodily labor, may write books in philosophy, poetry, politics, law, mathematics and theology, without the least assistance from genius or study."

The top frame of the machine, about 20 feet square, was composed of thousands of small pieces of wood. Every side of each bit of wood was pasted with paper on which was written "all the words of their language, in their several moods, tenses and declensions, but without any order." At a signal from the professor, 40 members of his class would turn iron handles at the edges of the frame. Thirty-six students would then read off the new combinations while four others recorded them whenever words were found that could be combined in a phrase. Already several volumes of broken sentences had been compiled, which the professor "intended to piece together to give the world a complete body of all arts and sciences."

For those who may have forgotten, Laputa was one of those strange lands in Gulliver's travels.

Before viewing the great machine, Gulliver had been shown many other interesting projects at the Grand Academy. The rehabilitation division had not yet claimed success for the experiment wherein a blind instructor and his blind apprentices were attempting to learn a useful trade. The sightless group was trying to mix colors for

painting, assuming that they could differentiate among the colors by the senses of feel and smell.

Another scientific project which might revolutionize the building of schools was the application of nature's methods to architecture. An ingenious instructor was indoctrinating his students with "a new method for building houses, by beginning at the roof and working downwards to the foundation." The theory was defended as entirely scientific, since it would emulate the practice of homebuilding by two insects, the bee and the spider.

Jonathan Swift wrote this misanthropy in 1726 when he had reached the philosophical age of 60. If it weren't just satirical fantasy, there probably would be demand today for a few exchange professorships with the Grand Academy at Laputa.

Unprepared

IN THREE-FOURTHS of the states, there is no single education authority to plan and administer federal aid for education, if and when the proposed aid becomes a reality. S. 246 requires that the money shall be expended only for current expenditures for elementary and secondary schools within each state. Only a dozen states have a single agency empowered to develop and administer an over-all plan for public education below college level.

Rightfully zealous of education as a *state* function, both the public and the teaching profession have insisted that federal aid be turned over to the state with an absolute minimum of federal control. It will be up to the state to demonstrate that these funds can be administered more efficiently and wisely than through any system of federal bureaucracy.

Legally responsible to the people, the state legislature will look to its state department for competent and intelligent leadership. In most states, such departments are handicapped by the diffusion of educational authority among other agencies. They are understaffed and underfinanced. The recent study by the Council of State Governments provides almost shocking evidence of this fact.

Congress might well say to many state legislatures: Put your own education house in order if you want federal aid for your schools without federal control.

First Impressions

IT'S not too late to make plans to greet the new teacher this fall. Has he located a place to live? Can the superintendent's office be of further help? Would he like more information about the community that will soon be his home and about the school system for which he will teach?

Especially appreciated by the new teacher is a handbook of information, often prepared by a committee of the teachers club. Appreciated even more, perhaps, is a personal welcome and those social occasions at which he is an honored guest.

A genuine welcome for the new teacher will be appreciated almost as much as his first paycheck.

The Editor

Schools must help
tomorrow's citizens
create new culture.

PRIORITIES in education for the **COLD WAR YEARS**

E. T. McSWAIN

Dean, University College
Northwestern University
as told to A.H.R.

WHAT the schools do in the next decade must be socially significant. Public education can no longer justify its existence merely to preserve the past. There was a time when the chief job of the school was to teach the tools of learning and to acquaint children with American history and the cultural heritage. From now on, the emphasis must shift so that we serve more effectively the personality needs of children and also help them prepare for intelligent living in the years 1975-2000.

Children are living with adults under circumstances much different from one or two generations ago. Applied science is having an unprecedented effect upon the psycho-social behavior of people in home, in community and in national and international life. For example, tensions are created by congested housing conditions and by the speed of transportation. The impact of adult behavior upon children through the press, radio and television influences their daily behavior. Frustrations experienced by adults in the aftermath of the great war have caused many to lose their sense of values. Such people are living for mere existence, rather than playing their rôle as parents and providing experiences to help children to live a better life.

During the agrarian period in this country, the home had a large part in providing socially useful work as well as character education. Society was largely nationalistic, and transmitting the cultural heritage was a process by which boys and girls were indoctrinated—or taught that which adults believed. There was so little change from one generation to the next that society provided an element of security that now is lacking. Today people feel somewhat helpless because of the pressure of so many new forces. They are confused as to what is desirable behavior because of the great variety of practices now evident. Their school education did not prepare them to cope with the requirements of a rapidly changing society.

TIME FOR MAJOR OVERHAULING

The traditional curriculum is in need of a major overhauling. As it now exists in many schools, it was fashioned during an agrarian period when adults really didn't see the importance of democratic learning. Now we have been thrust quickly—more quickly than man has ever experienced—into new ways of behavior which do not depend altogether on acquired knowledge but on functional, mental adaptation to new situations. Contemporary society requires a type of knowledge than can be learned only through experiences. Knowledge conditions behavior. A strong democracy is dependent on democratic minds.

Therefore, the school must concern itself as much with the process of

learning as with the content to be learned, because the *way* the child learns conditions *what* he learns and *how he uses* what he learns. Classroom experiences need to be examined in terms of the probable effect on each pupil's maturing personality. Instructional methods should develop critical thinking, careful observing, reflective listening, and the ability to solve problems. The characteristics of a democratic mind are learned ways of behaving. They call for democratic teaching in every classroom.

SHIFT THE EMPHASIS

It's more important than ever that we shift the emphasis in school to the challenging present and emerging future. The school has too long dealt with *answered* phases of culture, rather than with the unanswered.

As long as the school's function was primarily to transmit the cultural heritage, instructional patterns were authoritarian. The teacher set the standards of behavior. Answers were found in books or were given by the teacher. Attitudes of human relationships were not to be appraised to determine need for revision. They were to be learned as practiced by adults. The school said "Here is what the child must do and how." Memory and adaptation were stressed. Success in school was measured by the ability to recite what the curriculum required. The school was not aware of what was happening to the child as a person. The "private" psycho-cultural world of the child was neglected, if not ignored.



Photographs from the Edison Institute



Each individual lives in a world of his own psychological creation. If he is forced to take what is taught to him without questioning, then he lives in a different kind of private culture than the child who has the guidance of a creative, challenging teacher and is motivated to ask questions, to think about relationships, to get facts, to make decisions, and to examine the consequences of his actions on the behavior of people.

TOO MUCH — TOO FAST

We shall accomplish little in helping to improve the social literacy of the child in the elementary school unless we reduce the psychological load of both teacher and pupils. The child is required to learn too much too fast. The teacher is required to teach too much too fast.

The elementary school can accomplish a great deal if it recognizes that during elementary years the child is learning how to learn. Any shortage in the "how" in order to get the "what" may last a lifetime. Instruction methods will have to be concerned with (1) the understanding of people; (2) the development of the ability to observe and to ask questions about the social implication of what one observes; (3) the ability to recognize problems, define them, and look for information in the thoughts of other people; (4) the selection by the individual of a way of behavior to be tested in action.

This doesn't mean that everyone can do as he pleases. There are funda-

mental principles, attitudes and actions that lead to group approval. But to teach children quickly, without participation, doesn't produce the kind of individuals who can apply knowledge and solve their own problems.

If schools are organized for children, rather than adults, they will provide more things to meet the needs of children living and working together. These include: more time for creative arts; more emphasis on wholesome recreation; an opportunity to teach with radio, press and television; and opportunity to discuss together problems of living in home, school and community.

CREATE NEW CULTURE

An important social service of the school is to help children create a new culture. The social heritage can never be transmitted unchanged without affecting negatively the development of the democratic mind. Our cultural heritage is the record of a way of living in an earlier environment. We have passed the time when it was a living part of our culture. To the degree in which teachers try to adapt present living to what was successful living in the earlier periods, they can prevent boys and girls and men and women from meeting the responsibility of changing themselves to conditions requiring different solutions.

For instance, if elementary children read about the Civil War, it is a study in abstraction. It would be better for them to explore the changes close at hand and then, as the need arises, look

Elementary school children need an opportunity to discuss together problems of living in school, home, and community.

back into history to make comparisons.

More auditory and multisensory materials can help children get meaning from history. The Civil War doesn't mean a thing unless the child can re-live it through pictures or dramatics to give it meaning. Otherwise he can learn to talk about the Civil War, and he won't learn to sense the culture that existed.

As the school puts emphasis upon living with community problems now, under the guidance of an efficient teacher, the past will be referred to for some understanding of the origin of these problems.

The way we teach geography today is much more important than it was 50 years ago. In our early history, each region was more or less self-centered; there were fewer means of communication. Today geography has become worldwide, and the child should come to know the similarities and differences and interdependence of nations. But the child will not achieve this understanding if we teach him that people in other countries are "foreign."

How much of the Chinese culture are we bringing into the schools to look at? Only the symbolic! We tend to give children a chance to stand off and look at something instead of working with it. We create artificial learning.

APPLES TO SECONDARY EDUCATION

The social function of education is the same for elementary and secondary grades. So far as public education is concerned, it should be the general preparation of the citizen for living in a community—all the way through the secondary school. Provision should be made for some specialization in the high school, but much of the abstract and more specialized parts of the curriculum should be returned to the college (where it came from) such as exact science beyond the level of general knowledge. The specialist should be on the higher education level. Vocational education should be defined; all education is vocational.

Why teach a language, when after spending two years on it the child

Pupils can best gain knowledge about a previous culture by actually using the tools and methods employed in an earlier day.

doesn't do anything with it,—if it doesn't help him gain meanings? As his competency and interest becomes more mature, he can then make choices.

All this means a different emphasis on what is successful learning in schools. At present, the instruments of evaluation are largely in terms of the culture of yesterday. We don't have the means yet of appraising how our children are thinking, or what they are thinking.

TEACHER'S ROLE

The overemphasis on school organization and administrative efficiency has taken away from the teacher a feeling of independence; he is reluctant to assume a courageous and independent rôle as a teacher. If he feels that he is merely a cog in an organization, with too much of the leadership coming from the few, in time something happens to the quality of his teaching.

There is some effort now to make the preparation of teachers more functional and to improve the methods of instruction. But the movement is slow—too slow. The emphasis has been on research and specialization. People who are going to live with children need a broader program of general education.

The best teachers ought to work with our youngest children. This statement is not made to imply higher salaries just for elementary teachers. It is because of the contribution that competent teachers can make to cultural and psychological development of children.

Teacher preparation should develop a competency in general education, an understanding of the important phases of people. It should help the teacher develop social literacy—to be aware of business and industry, labor and agriculture; to have a sociological understanding of children, biological as well as psychological. The methods of learning that we advocate for children must be applied to the *learning for teachers*.

Unfortunately we don't have the time it's going to take. It is later than a lot of people think. More emphasis in in-service education ought to be placed upon the teacher's becoming



better acquainted with the community rather than so much stress on college courses.

A superintendent of schools may wisely advise teachers to spend some summers in activities other than attending college summer school. Teachers should go out into the community, get out with people who are earning a living. Travel to other countries should be encouraged.

It is the job of the principal to stimulate teacher growth. He ought to be quite competent in the field of community sociology. It's his duty to help interpret the community to the teacher. Also he should be effective in interpreting the school to the community. He should spend much of his time in the community.

We need a different kind of process for reporting to the parent. One that is more informal, descriptive of the behavior pertaining to the particular child. More reporting should be done by the child to the parent, and by the teacher to the parent. The school should be so organized that every parent could have a conference with the teacher within a reasonable length of time. And administrators should work out facilities for parent conferences at a time when the teacher is not psychologically tired.

PARENTS' RESPONSIBILITY

Much of the functional leadership for improving education ought to be assumed by parents, rather than imposed by educators. Parent-community

education first includes the acknowledgement by the parents that they also are the teachers of their children, and that they cannot delegate full responsibility for such education. This calls for means by which parents become acquainted with the characteristics of good education.

If the board of education, supported by the parents, takes a limited interpretation of education and the culture, they may require a school program that is not appropriate to the mental and emotional needs of the child today. If the school board sees education as a social process, it may be much more concerned about teachers and administrators designing a more appropriate program.

The quality of education that adults provide in the school during the next decade will condition greatly the ultimate victory of democracy. Because of their professional qualifications, administrators and teachers are responsible for designing a school program that will enable our millions of young citizens to cope successfully with the tensions and problems of the emerging cold war years.

To ensure the maximum mental and moral development of these young citizens calls for intelligent leadership and united action of administrators, teachers and parents. Today's curriculum must make a significant difference in the social thinking and the civic action of tomorrow's citizens, if schools are to continue to justify the faith and support of the public.



This absorbed pair is receiving class instruction in the flute in the Milwaukee public schools.

HOBART H. SOMMERS

Assistant Superintendent of Schools
Chicago

For developing personality, what's better than

MUSIC

A COMPLETE education program at all levels today must include a place for the personality developing subjects. Of these none is so nearly universal, so effective, or so acceptable as music. For the many contributions it can make, music is coming to be recognized as a fundamental tool of education, just as are the three R's, history and the other basic subjects.

BASIC STUDY, THINKS PUBLIC

The people of the United States are fully aware of this. Last year the American Music Conference, a non-profit organization dedicated to increasing the part music plays in the life of the nation, conducted a nationwide survey under carefully controlled conditions. Ninety-five per cent of the people participating in the survey said they felt every child should have music as a basic part of his education. Eighty-five per cent said it should be included in the regular school curriculum and paid for out of the same tax funds that support other educational functions.

This is a concept of music's place

in education far beyond that in practice in our schools. It is a concept of music for every child—without limitations on the basis of "talent" or "inclination" or "ability to benefit."

A subject having so much to offer automatically finds its place in the really balanced curriculum. The administrator who recognizes the need for putting music on the same basis as are other subjects may have certain problems to solve before he can implement a program. These are:

1. Accommodating music in the budget.
2. Working it into an already crowded curriculum.
3. Finding means of teaching the subject matter properly. This involves selection of specialists and training of classroom teachers.

These problems have been solved effectively in many school systems and are being solved in more of them every year.

The answers to problems 1 and 2 come together. If music is recognized as part of the basic curriculum, then it is entitled to its proportionate share

of the budget and the school day. This "problem" is basically a remnant of the outmoded concept that music is an "extra," requiring extra funds. As a fundamental, its right to share the budget and school time is obvious. Adding music to the curriculum means only more effective apportionment of budget and school time.

While we are reevaluating all aspects of our teaching system, it is time that we reevaluate the proportionate emphasis placed on all the subjects in relation to their contribution to the child's complete education. Music rates a budget and a class schedule that will make it fully effective.

HOW TO GET TEACHERS

The third problem, that of teaching, is being met in a number of ways. Some schools have reached out to attract the specialists they need. Others certify private music teachers to give class instruction at appointed hours, either in the school or on released time.

For the basic and elementary instruction, thousands of classroom teachers are taking workshop training that

prepares them. The Music Educators National Conference, a division of the N.E.A., is holding such workshops in areas across the country, within reach of virtually every school system. This is part of its thorough approach to the needs of the music teaching system based on its Outline of a Program for Music Education.

PRESCHOOL THROUGH HIGH SCHOOL

This outline makes music an integral feature of school work from preschool through high school. It recognizes that the complete music program is part of the complete educational program and leads the child's development from early rhythmic expressions through advanced appreciation and performance. This is aside from the importance of integrating music with instruction in mathematics, physics, geography, history and other subjects, which also has been a part of widely accepted teaching technics in recent years.

The M.E.N.C. outline basically lists these areas of instruction:

Preschool and Kindergarten: listening; singing; motion to music (dancing and singing games, eurhythmics); playing simple rhythm instruments (triangles, flutophones, drums); creative activity for self-expression.

Primary Grades: listening, for enjoyment, memorization, ear training; singing, both alone and in groups; motion

to music; playing an instrument in rhythm bands, instrumental classes or simple orchestras; creative activity; introduction to reading and eye training.

Intermediate Grades: listening; singing; motion to music; playing an instrument, in classes and in orchestras or ensembles; creative activity; music reading.

Junior High School Grades: general course in music, for understanding and appreciation; vocal music; instrumental music; listening to literature of music; theory. Assembly and outside musical activity in these grades includes assembly music programs, in which the entire student body sings, the school's musical organizations perform, or outside musical artists appear; recitals and concerts by students; educational concerts, and attendance at musical programs given in the community.

Senior High School Grades: music appreciation; vocal music; instrumental music; a listening course in the literature and history of music; theory.

IS GOOD PUBLIC RELATIONS

Assembly and outside musical activity is the same as in junior high school grades but more advanced.

It can be seen that such a program breathes life into the school experience of the child. It develops one of the most tangible evidences of educa-

tion's contribution to the individual's life and is, therefore, most readily accepted by parents. Its inclusion in the curriculum is not only good education but also good public relations.

LOCAL SUPPORT GROWS

As the public's consciousness of the need for personality developing subjects increases and as the facts about the comparative lack of music in the curriculum become known, it is not surprising that organized support for better music education also is increasing.

In addition to the American Music Conference, organizations with units in communities throughout the country are making music education in the schools one of their objectives. These include the National Federation of Music Clubs, the music committee of the National Congress of Parents and Teachers, the Music Educators National Conference, and Kiwanis International.

These represent the forward looking and active elements of our society. They give their active support only after they are convinced of a need. They are known to support advances that foster the general welfare. Their support for a basic place for music in the complete education program assures every school administrator of the community the support he needs to take a step forward.

Our nation literally lives with music—consumes it almost every hour, in many forms, with ever increasing enthusiasm. It is time that this real force in American life finds its proper place in our educational structure.

The clarinet class in this school in York, Pa., is "tooting pretty." Musical instruction in the York schools takes place during the school day and has become a well integrated and popular part of the total program.



MARY M. MANEVAL

Teacher, Eisenhower High School
Norristown, Pa.

Scene from "The Ambitious Leprechaun," which helped develop an appreciation of poetry among the students.



Creative learning through the **WEEKLY ASSEMBLY**

THE weekly assembly program at Eisenhower Senior High School, Norristown, Pa., has been developed as a means of creative learning. Not only in the content of the program but also in its planning and supervision, the interests of students and teachers are widened and worthy achievements are recognized.

Our assemblies are held each week during an activity period. Monday is chorus period for those students who desire to sing; Tuesday is reserved for faculty meetings; homeroom meetings are held on Wednesday; Thursday is the assembly day, and clubs convene on Friday. We may not always have the assembly at the same hour in or on the regular day, because various factors, such as visitors and games, may alter our plans.

SCHEDULE AND ILLUSTRATIONS

A schedule for a year should be built around a well chosen theme so that a degree of unity may be developed. Our 1947-48 program gave the student a picture of the heritage that is ours in our country, our share of responsibility in the work of today,

and the opportunities that are open for the future.

The Constitution Day program, prepared in the United States history department, was an imaginary radio broadcast at the time the Constitution was written. The listening audience heard the announcer giving a brief summary of the abiding strength of the Constitution, others pointing out how it worked, and the delegates to the convention debating the important issues. Music and sound effects were used. The art and music departments and the Costume and the Stage Craft clubs helped with the program.

Each year we recognize Pennsylvania Week with an original assembly program that has been written and arranged by students and teachers. Every state can find in its music, its composers, its artists, its heritage, its resources, its slogan, and its people a wealth of material around which to build a story. Dramatization, radio, panels or forums provide a variety of approaches. Many classes, departments or clubs would be able to assume responsibility for such an assembly since the methods of approach are so varied.

"If I Were Twenty-One" was the challenging topic for the pre-election assembly. The script provided for a suitable background on politics and a local government official appeared in person on the stage to answer questions that had been submitted by the government classes. The aim of the presentation was to acquaint the students with the importance of participation in government in our democratic system.

On Nov. 3, 1948, the members of the senior government classes experimented with a partially extemporaneous assembly. The objective was to present to the student body a résumé of the national election of the preceding day.

The students listened to radio and television reports on the voting until the early hours of the morning. By 1:30 p.m. they had completed maps and charts which showed the results of the election.

A panel of students questioned those who represented Mr. Crossley, Dr. Gallup and Drew Pearson to determine how they collected information for their polls and their predictions.

Students representing the winning party machine personnel and the losing leaders and candidates were questioned by the panel. Methods of campaigning were surveyed, and stress was laid upon the increased use of music as a means of influencing voters.

If a program of this type is to be successful, teachers must teach students a great deal about elections and political parties. But the students like it.

To set the stage for the Career Conference each year, appropriate films and

couraged teacher was discovered at his desk, marking papers and bemoaning the lack of imagination of some of his students. The tired teacher falls asleep and, in a dream, is approached by a leprechaun who begs to be admitted to a class so that he may know what the young people of the school are learning.

Having agreed to make himself invisible to members of the class, the leprechaun is given an opportunity to hear a panel discussion of what poetry

for publication in the National Anthology of High School Poetry and one was awarded "special mention."

The program, presented as an assembly, also was broadcast through the facilities of television station WPTZ in Philadelphia, as a part of an experiment in the use of television in education.

The obvious soundness of the teacher's philosophy, the originality of the script, and the enthusiasm and enjoyment of the participants brought about



Senior government class holds panel discussion following 1948 national elections.

speakers are presented. The Rotary Club cooperates with the guidance department in the selections and assumes responsibility for the financing of the program.

ORIGINAL POETRY FEATURED

The students in our school look forward eagerly to the annual assembly program of the Mask and Wig Dramatic Club. This year the club, in conjunction with a number of 11th grade English classes, produced "The Ambitious Leprechaun," an original fantasy written and directed by the club sponsor, an English teacher.

The stage setting was a typical classroom. As the curtains opened a dis-

is and the reading of original poetry written by members of the teacher's classes. The teacher, awakening after the dream class, decides that imagination is not dead, even in the twentieth century.

The objectives of the program were to display methods of developing some appreciation of what poetry is; to demonstrate that even high school students are capable of some poetic self-expression; to arouse the interest of the student body in poetry, and to encourage those who had written poetry to further attempts at creative writing.

Of the original poems read as a part of this program, six were accepted

an unusual degree of communication with the audience, and an upsurge of interest in poetry was noticeable throughout the school for weeks after the program had been produced.

It is not entirely necessary to do an elaborate production; a good program may be simple, with no make-up and no costumes or scenery. One of our outstanding programs was produced during the war years. The English department presented in radio form a series of cuts from a popular book. It was simply done yet strikingly appealing.

Student field trips to slum areas or factories, housing problems, conservation projects, government meetings,

and numerous other subjects provide excellent materials for a program. The administrator must be aware of the nature of the work; time must be provided and an endeavor made to establish similar points of view and a practical frame of reference in a system so that all concerned, both students and faculty, know the direction in which they are traveling. Each assembly presentation should have an objective, and every available effort should be made to reach that goal.

Certainly one of the following objectives should be attained.

MINIMUM OBJECTIVES

1. To provide an opportunity to behave democratically—to practice what the school claims it is teaching.
2. To aid in forming intelligent public opinion both within and without the school.
3. To lessen intergroup tensions with practice through intergroup relations.
4. To build subtly a desirable school spirit.
5. To use the auditorium as a setting for the best in spirit and talent and listening.
6. To set standards of taste in entertainment and humor.
7. To motivate learning.
8. To find latent talents.
9. To stimulate opportunities for student-teacher planning.
10. To teach facts.
11. To develop attitudes on issues of local, national and international importance.
12. To utilize drama not as an end in itself but as a promoter of action in real life.
13. To use more frequently the student's frame of reference in the formulation of productions rather than his performance as an index of learning.

HOW THE SYSTEM WORKS

Working on the assembly programs are two committees, one composed of faculty members appointed by the principal and the other of students who have expressed a desire to work in the particular activity. Those students who have creative abilities are especially encouraged.

At first, the group included the president and the liaison officer of the student council; two each from the Senior Congress and the Junior Congress; two sophomores appointed by the faculty adviser; one student each representing vocal music, instrumental

music, and the vocational department; one from each speech class; one boy and one girl representing physical education, and one student from each of the classes and each of the other departments.

As the year progressed, at the request of the committee, 10 more students were added from the student body at large. Students were given an opportunity to apply for membership by answering a questionnaire on abilities and telling why they desired to become a member of the committee.

We met twice a month after school. The committee elected its own officers, who became the executive branch and were responsible for the entire organization. Some of the subcommittees were: department, regulars, script, broadcast, music, stage, film, outside, career, program and survey.

MEET ON SCHOOL TIME

Members of the faculty committee were free to attend the student meetings whenever they wished. If for a particular reason, such as a canceled program or the sudden appearance of an added feature, the executive board felt the problem should receive the attention of the entire committee, it was permitted to call a special meeting during the regular school day, provided it did not abuse the privilege.

During the last year the committee was reorganized and the schedule changed so that we could meet entirely on school time.

The administration of the assembly, which is the integration of departments and people, should be virtually automatic. The administrative work, insofar as the teachers are concerned, is largely the responsibility of the sponsor. With the assistance of the committees, he outlines the work to be done by various departments.

No teacher need necessarily be overburdened in the assembly presentation. Group dynamics, socio-drama, creative writings, audio-visual aids, and above all the employment of the students' frame of reference offer excellent backgrounds for preparations.

The year round plan and procedures are essentially as follows:

1. During the second semester of the school year preparations are begun for the next year.
2. The faculty committee offers ideas, criticisms and suggestions for the new schedule.
3. Teachers and departments are given an opportunity to state ideas

they have that are new and appealing.

4. In the student committee, the outline for the following year is arranged in skeleton form through the work of various committees. One group will do the work for the "regular" or "must" programs, such as Honor Society and Awards. Another group may select departments to plan and to work together; another may aim to prepare a script while another will search for ideas.

5. Departments are integrated whenever possible.

6. Objectives, themes and complete schedules are formulated.

7. The tentative schedule is presented to the faculty.

8. Reorganization is done if needed.

9. The final draft is made.

10. The work is initiated with the plans for September and October of the following school year.

11. The faculty chairman is responsible for the organization of his group insofar as the teachers are concerned. Students are always working with the teachers.

12. Plans are made and the materials organized during school hours.

13. Final rehearsals are held in the auditorium during club period or on schedule.

14. Advance notices are sent to each homeroom concerning the approaching assembly so that each student has been "briefed" as to what to expect in the program.

If an assembly is scheduled every week, a small school may find it a problem to give an original program each time. However, variety is always advisable in the programs, and no school should fail to explore the possibilities of its community. Assistance and cooperation usually are available from government units, service clubs, libraries and farm agents.

CHANCE FOR EVERY STUDENT

If the teacher in charge has sufficient time and a little ingenuity, every student in a school, regardless of its size, should be able to appear at least once a year on the stage.

The educational policy of the military has convinced us that if a student is to retain knowledge, he must have a good reason for retaining it. Participation in meaningful activities furnishes a background for the development of other interests.

Learning can be tied up with the creation of a new plan, with a creative production.

A TEACHER'S LOT CAN BE A HAPPY ONE

—if school administrators will consider the human element

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IN ADMINISTERING public education, as in managing other enterprises in which large numbers of persons are engaged, success depends upon personnel policies that develop and encourage the best efforts of employees. To establish these policies, it is necessary to understand the basic human drives and the incentives that operate in the lives of people.

There is nothing peculiar about persons engaged in teaching. Their background is similar to that of workers in other professions and in industry and to that of women who devote their lives largely to homemaking. True, most teachers are women, and, as women, they are impelled by the same incentives that influence the other members of their sex. There is reason to believe that, in a few respects at least, women differ psychologically from their male colleagues who constitute such a small, though important, segment of the teaching personnel.

WHAT DOES IT TAKE?

School administrators and those who determine personnel policies would do well to inquire: What are the environmental factors and conditions that are most in harmony with the basic incentives of the woman worker? With the answers to this question in hand, they can assess personnel procedures and can make whatever adjustments are necessary to motivate the few men in the schools.

There are limits to our understanding of adult behavior, and no one can speak with complete certainty about the relative effectiveness of various incentives on human effort. There seems to be, however, considerable agreement among students of the problem that workers prize some things as much as, if not more than,

they value money. Moreover, there is good reason to believe that women place financial incentives lower on the scale of values than men do, even allowing for the differences in the relative need of the two sexes for money.

One of the most interesting discussions of the attitudes of women toward their jobs is found in a recent book by B. J. Kidd, entitled "Women Never Go Broke" (J. B. Lippincott Co.). Mrs. Kidd, vice president of a large advertising company, has a rare insight into human motives and behavior. She points out that in the table of values and job incentives women workers prize the following more than gold:

1. *Men Co-Workers and Masculine Attention.* According to Mrs. Kidd, the typical woman worker prefers to have some men around and to be associated with them rather than to be confined to a strictly feminine atmosphere.

2. *Admiration.* More than wages, continuity of employment, and good working conditions, women want to be admired. They want their efforts to be noticed and appreciated. They need to feel important, to glow with pride, to feel themselves members of a worthy company, to have purpose and significance. They need to have their lives lifted out of the commonplace.

3. *Congenial, Sympathetic Bosses.* Women are more interested in people than in things. They have greater fear of failure than do men and are more sensitive and emotional. To be happy in their work they must like their boss.

4. *Group Work.* Women prefer to work with others. The normal woman worker does not like to be alone.

5. *Convenient Location of Work and Time Off.*

6. *Pleasant Surroundings.* A little beauty in business, a vase of flowers, window curtains, and some attention to the artistic and esthetic are important to women.

7. *Convenient Pay Day.*

It is interesting that the author places financial rewards after the seven incentives just enumerated. Some of the items mentioned probably apply less to the public school situation than to business and industry. Convenient location of work and convenient pay days seem not to be matters of great importance to teachers at the present time, perhaps because the pay-day problem has been thoughtfully considered and generally resolved.

MASCULINE ATTENTION

But those concerned with personnel policies might well look at the other incentives in the list. Men teachers in the public schools are few, and an elementary school teacher's association with men is confined almost exclusively to out-of-school hours. The janitor is not infrequently the only adult man in a school building. This leaves a teacher without any male companionship or masculine attention during her working hours.

High school teachers fare somewhat better in this respect than do elementary school teachers, which may account in part for the fact that present teacher shortages are greatest in the elementary division of the school system. Since opportunities to meet marriageable men are so markedly limited for teachers in the elementary school, the typical young woman, in choosing a vocation, will score elementary school teaching low.

If Mrs. Kidd is right in her contention that women workers place men

at the top of or high on the list of job considerations, it seems likely that the reactions of women teachers, if sought, would reveal a similar preference. If this is the case, then we should strive earnestly to bring more men into the teaching profession and should alter our selection policies, insofar as circumstances permit, to care for this incentive. Since masculine association apparently tends to spur women workers on to greater efforts and adds much to their satisfaction, it should not be ignored when we are formulating personnel policies.

A LITTLE APPRECIATION

Much has been written and said about the second incentive on Mrs. Kidd's list, admiration. This should be so well understood by now as to require no further emphasis. Unfortunately, our personnel practices are not always consistent with the need which all normal human things have for approval and recognition.

We do not always glow with pride because we have not been made to feel that our staff is top-flight and that our efforts are a major factor in the success of the school enterprise. Fortunately, considerable progress has been made in educating administrators and supervisors to the importance of satisfying this need for approval and recognition.

One does not need to become a hypocrite and a back-slapper to create a feeling of well-being and satisfaction on the part of school employees. One needs, rather, to be observing and alert.

The weight given to congenial, sympathetic bosses by women workers has significant implications for the selection of principals and supervisors. There is no place for sour personalities or for the maladjusted in administrative and supervisory posts. Men and women whose early childhood experiences have left deep scars on their personalities should not be chosen to serve as principals or should not be given responsibility for supervising and managing group enterprises.

We need happy persons with deep insight and with a genuine liking for people in positions of leadership. The personal problems of teachers cannot be divorced from their teaching problems, and unless sympathetic attention and help can be given to the former, professional improvement, if made at all, will be slow.

Some changes in the attitudes of existing administrators and supervisors can be brought about through workshops and other in-service devices. But unless these officers can be led to recognize the importance of treating teachers in a thoroughly sympathetic manner, the only hope for change will lie in the appointment of new personnel to executive and supervisory positions as vacancies occur.

There also is reason for giving thought to the high ranking given by Mrs. Kidd to group work. The fact that business and industrial workers prefer to work closely with others is probably not accidental. It may spring from a sense of insecurity, but it appears equally likely that this choice is related to a gregarious tendency. Classroom instruction obviously requires considerable individual work. But successful teaching also demands much activity outside of regular classroom assignments. Here, committee efforts can wisely be encouraged, and group discussions can be held. The satisfaction growing out of working closely with others can thus be fully provided for. Curriculum improvement programs have real merit in providing this incentive.

As for pleasant surroundings, this condition is certainly as applicable to teachers as to workers in industry. Classrooms that are light and attractive and esthetically comfortable affect the outlook of teachers as well as that of pupils. Moreover, teachers' rooms that are restful and artistically appointed will make the job pleasanter; in short, a physical environment that has appeal will go a long way toward maintaining high morale and in bringing out the best contributions teachers have to give.

"ONE OF THE GANG"

Salary cannot be overlooked, nor should it be unduly depreciated. A professional standard of living is essential if teachers are to realize their highest potentialities. Teachers today are so preoccupied with financial problems that they are devoting a disproportionate amount of their time and energy trying to resolve their budgetary problems or are badly cast down and frustrated. While women workers may not be as concerned about salary as about some of the other items discussed, they are bound to be adversely affected when the pay level is below what they require to meet their every-

day needs. Hence, it cannot be ignored.

There are some evidences from the public school field itself that have meaning for those formulating personnel policies. In a study of staff reactions in a Midwestern community of 60,000 population, Decatur, Ill., it was found that certain policies correlated highly with good morale. A feeling that she is "one of the gang" is apparently characteristic of a teacher with high morale. Eight out of 10 teachers in the high morale segment of the teaching staff in the study mentioned reported that they felt they were "one of the gang."

Eight out of 10 in the high morale group also indicated that they felt that they counted for something in the school system. This gives further support to Mrs. Kidd's admiration incentive. It is human to want to be important, to feel needed, to count in the success of the enterprise.

Two out of three teachers with high job satisfaction scores said they were consulted sufficiently regarding school policies that affected them. Morale appears to be closely related to a feeling that we have a voice in decisions relating to our work and our institutional life.

A SYMPATHETIC BOSS

Four out of five of the more enthusiastic members of the staff (the high morale group) reported that they were definitely satisfied with the way their supervisors treat them. Here, again, is corroboration of the claim that a congenial, sympathetic boss is to be valued more than fine gold. Closely related to this finding is the fact that eight out of 10 teachers ranking high in morale stated that they felt free to employ the teaching methods and materials they believed to be most fruitful.

Three other practices or conditions worth noting in relation to morale are: (1) an equitable division of the work load in schools; (2) a generous supply of teaching materials, and (3) a situation that permits teachers to know their pupils. The majority of teachers evidencing high morale expressed the belief that their schools met these conditions satisfactorily.

While objective evidence is still meager and while our knowledge of how best to motivate teachers is far too small for us to speak with absolute certainty, there are strong indications that personnel practices should conform to the conditions outlined.

I want to see

A GOOD HIGH SCHOOL IN ACTION

ALEXANDER FRAZIER

Curriculum Consultation, Phoenix Union High
Schools and Phoenix College
Phoenix, Ariz.

Riffling through the pages of the long letter, the principal discovered that it was from the visitor he had agreed to see. So he settled back in his chair to read the following document:

I HAVE seen good high school teachers and good teaching. What I want to see is a good high school. Therefore, I am interested in the organization of certain services and programs that will demonstrate the degree of group awareness and the amount of group planning and work that go on in your school.

Will you please arrange for one period of my day to be spent with each of these persons: the head of your counseling program, the person responsible for audio-visual aids, the head librarian, your health coordinator, the adviser for student government, and, of course, yourself?

DOCUMENTARY EVIDENCE

I am particularly interested in obtaining documentation on what you are doing, in the form of reports, charts, minutes of meetings, photographs and the like. Since my time is so limited and since I want to scan the situation as well as to talk, perhaps I should specify with some exactness both what I should like to talk about and what I should like to witness. Would you be so kind as to have these notes for each of the persons mentioned above copied off and sent to him in preparation for my visit?

Counseling. I wish to see evidence of the manner in which test data are routed to each teacher. I would be

interested in an outline of the testing program, of course, but much more valuable would be an account of how the results are made available to the staff. You may have worked out a method of coding such information for general teacher distribution. If you have, I would be much pleased to study it.

Also, I wish to have the opportunity to sit in on a case conference in which the full resources of the school are being brought to bear upon the analysis of a behavior or personality problem. If you cannot conveniently arrange for such a demonstration during the day I shall be with you, perhaps you would have a secretary make a record between now and then of one such conference for me to read and discuss with you.

Audio-Visual Aids. Here, I am most interested in certain formulas and statistics. Will you have ready for me a statement of the method you use to determine which films you can better afford to buy than to rent? I would also like to see a schedule of projected film purchase for the next three years.

Another statistical item: Will you please express in ratios the relationship of pieces of major equipment (projectors for motion and slide films, tape-recorders, playbacks) to the number of classrooms? I should also like to make a quick tour during this period to see how you are darkening your classrooms. I assume that you are using films as you are the audio equipment, in a regular classroom with a single class.

Library. I would like to see a schedule of the classes that have visited the library during the week before my

visit and of those that are planning to visit during the following week. If you can summarize briefly for each visitation of the preceding week the type of use made of the library, you will find me grateful.

Copies of bibliographies that have been prepared cooperatively by librarian, teacher and students in the visiting classes would be valued.

Part of my period with you I should like to spend in the teacher section, noting the type and use of the books provided. If there is sufficient time, I shall plan to interview students who are working in the library under teacher supervision on the day of my visit.

Health Coordination. May I go through two organizational items with you: (1) the setup for a regular conference of teachers and other staff members concerned with teaching health matters, and (2) your outline of the amount and kind of health teaching that goes on at each grade level?

I should also like to witness, if it can be arranged, a class or two in which coeducational recreational dancing and games are being taught. Perhaps if you have no such projects underway at the time of my visit, you will be able to obtain photographs of such activities that I might have for my files.

HOW ABOUT CO-OPS?

Student Government. Please prepare a statement for me, if you will, of the way you distinguish between behavior problems that should be handled by your counseling and psychological services and those that may safely go before your student court. May I also have a description of the method you have worked out to ensure reporting back to homerooms or other basic governmental units of what occurs in student government at the council level?

It would interest me to see the extent to which you have succeeded in making use of cooperatives in the management of your school business with students—bookstore, cafeteria, athletic income, publications and the like. If the books of any such organizations are in order for inspection, I should like to see them.

Miscellaneous. In the period that I am to spend with you, the principal, there doubtless will be much to discuss about what has come to my attention during the rest of the day. However, there are two matters in par-

ticular that you may well anticipate. I should like to see the schedule you have for those working groups of teachers that are meeting regularly and often within the school day. If you have one such group in session on the day of my visit, I should like to sit in with it for 10 or 15 minutes to catch the nature of the process. Minutes or records for such a sample committee would also interest me.

Finally, I should like to go over with you your detailed records and reports on all students who have left school during the current year. If you have charts on the curve of school-leaving, you may wish to include those in our conference. I would also value copies of the summary reports you have been making each year on this problem of drop-outs.

* * *

The letter ended abruptly, with "Expectantly yours." Once he had let the pages settle to the desk, the principal sat for a moment quietly.

Then he felt along the edge of his desk for the buzzer. When his secretary put her head through the doorway, he spoke softly, his eyes just then beginning to glaze.

"Miss Vincent, will you please bring me a glass of water—and an aspirin?"

Convention learns more about the **MODERN PLANT**

THE modern school was visualized for one of the programs at the second National Catholic Building Convention and Exposition in Chicago, June 14 to 16. Four speakers discussed the physical environment of the classroom in a program planned by The NATION'S SCHOOLS, with its managing editor, Arthur H. Rice, presiding.

THE NEW CLASSROOM

To stimulate children to capacity by every means, schools need to abandon the stock classroom with its straight row-by-row seating arrangement, dominated by the teacher's desk precisely at front center, said Lawrence B. Perkins, senior partner in the firm of Perkins and Will, architects and engineers, Chicago. As purposes to be accomplished in the classroom are expressed, they will lead architecturally to new forms.

By colored slides and free-hand drawings projected on the screen as he talked, Mr. Perkins demonstrated how an efficient classroom facilitates well-rounded teaching, learning and living activities. It will provide for: (1) individual academic; (2) group academic; (3) individual activity—work benches; (4) group activity; (5) clothing, and (6) personal hygiene. Flexibility in school architecture is possible through bolder use of materials. For example, light wood is used not only as a reflective factor for desk tops and floors but also as paneling for walls that can serve as bulletin boards. The classroom should be kept light, colorful, cheerful and simple.

Mr. Perkins endorsed the one-story school building, both from the point of view of usefulness and economy.

Discussing the subject of materials and equipment, F. R. Scherer, superintendent of school buildings at Rochester, N.Y., advised that, in general, building construction today does not differ substantially from what it was during the war.

"Unless one is in a position to build with venture or risk capital, there is an inherent reluctance to invest in materials or equipment the behavior of which is in doubt."

Mr. Scherer discussed the selection of various materials of construction in terms of (1) performing the desired function, (2) achieving the desired architectural effect, (3) achieving proper structural performance, and (4) being economical as regards initial cost and recurring maintenance costs.

VISUAL COMFORT

"The key to visual comfort in the classroom is the attainment of brightness balance," said Joseph W. Cannon Jr., publishing director of *College and University Business*.

To achieve this balance, the natural light that comes in the classroom must be diffused, either with window shades or venetian blinds or by the use of stationary diffusers, light-directional glass block or overhangs of the roof.

For artificial lighting, the proper shielding, diffusing and reflecting of the light source, whether it be fluorescent or incandescent, is the job of the man-

ufacturer. In selecting fixtures, the first consideration should be: How well has he done that job? Easy maintenance, appearance, cost and other factors should be secondary considerations only.

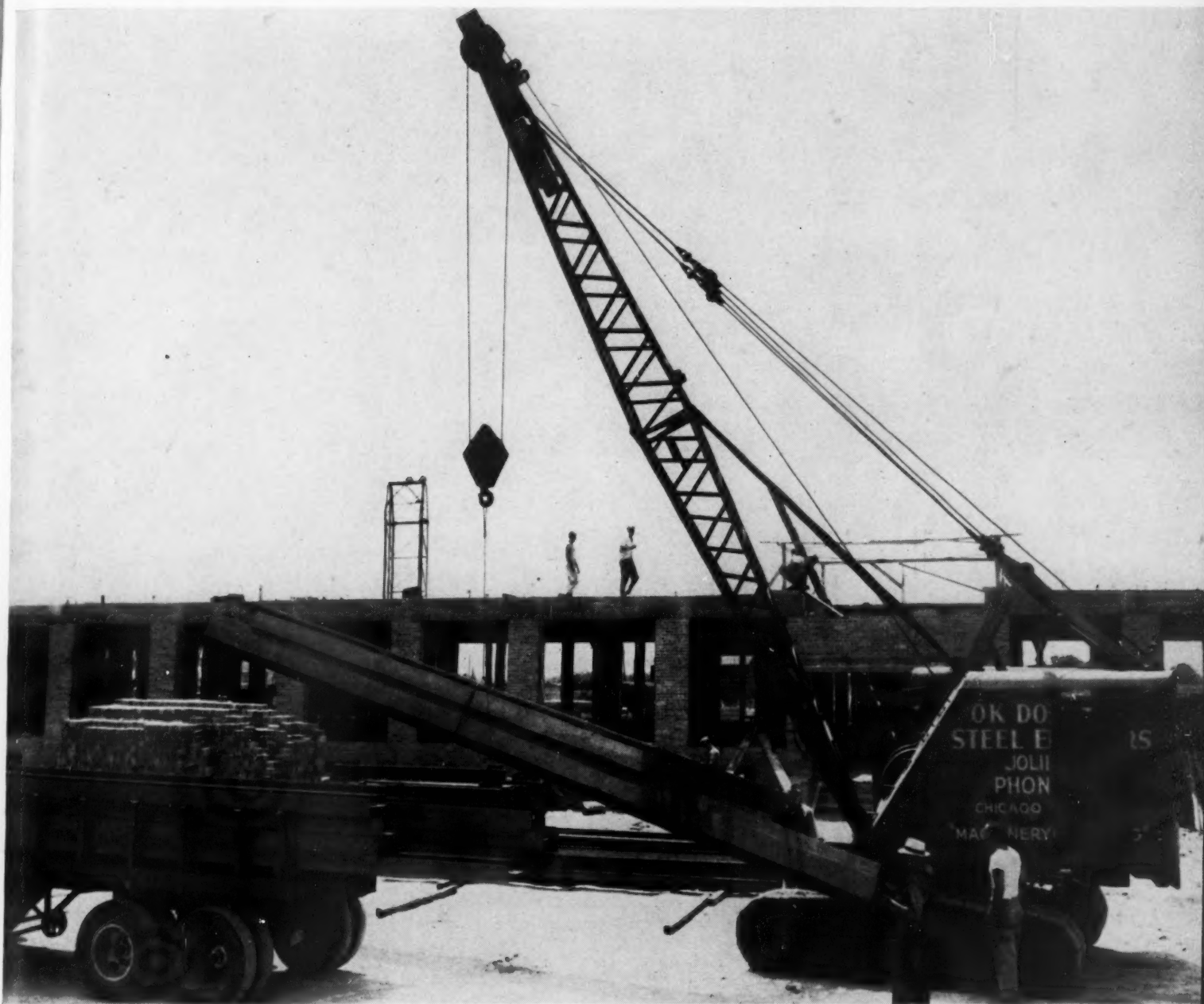
The third consideration is the reflective factor of all the surfaces in the room. White ceilings, light colored walls, light colored asphalt tile, linoleum, rubber tile and other floor coverings, as well as maple and certain other properly treated woods, will provide brightness balance. Slate blackboards should be replaced with new types or coated with new types of paint. Light colored seating units complete the picture.

ECONOMIES ARE POSSIBLE

An encouraging development in school construction is the declining cost of materials, said Thomas J. Higgins, director of building surveys for Chicago public schools. The drop in prices has been reflected in the costs per cubic foot for secondary schools in the Chicago suburban area since January. Ventilating work in the construction stages still is more costly than in other sub-trades.

Additional savings are possible through careful planning, he said, emphasizing such considerations as room size and location of facilities. The location of washrooms to permit ready use is more important than the number of fixtures installed. When one-story buildings exceed 12 or 14 rooms, heating and ventilating becomes costly from the standpoint of operation.

BUILDINGS GO UP



Hinsdale Township High School, Hinsdale, Ill., Childs and Smith, Architects

AS COSTS COME DOWN

The Nation's Schools Portfolio on Schoolhouse Planning

SCHOOLS CAN SHARE IN



SCENE I: *Pleasantville Board of Education's Office, November 1948.*

SCENE II: *Same Office, Six Months Later.*

SCENE III: *Pleasantville High School Grounds, July, 1949.*



SYNOPSIS: As the curtain rises on Scene I, Architect Jaspar Horn, A.I.A., is acting as clerk while the Pleasantville board of education opens the six general bids submitted on the proposed new high school building. The atmosphere of the board room is tense, and as bid follows bid worry plows deeper furrows into the brows of the board members. "Every last one of them is out of sight," mutters President Manning. "Gentlemen," suggests Architect Horn, "since the bids so far exceed the estimate, suppose we delay for six months and then resubmit the same drawings."

Scene II finds the same group assembled. This time there are 11 general bids. As Architect Horn records the first bid, faces about the table grow animated. As succeeding bids are opened, there are nods of satisfaction and a general upturning of mouth corners all around the leather topped table.

As Scene III opens, the newly leveled high school site accommodates a double row of high school jalopies, 1949 Fords and a few luxury jobs. A tight huddle of citizens is dwarfed by a giant steam shovel rearing above them, ready to take the first bite of Pleasantville clay. Someone has affixed the blue and gold school colors to the roof of the steam shovel's cab. And now the school band makes a ragged attack on an unidentifiable but unmistakable Sousa number, after which Supt. Harper gives the signal, the engineer toots twice, and the first shovelful of soil swings aloft. The high school plant is on its way.

THIS little drama is being enacted in most parts of the nation these days. Building materials are more plentiful now, labor is putting on a little steam, and contractors are once more in a competitive situation.

Two architectural firms and one school consultant in the Chicago area report an average drop of 10 per cent in school construction costs since late 1948. That this favorable condition is fairly typical of the country at large can be deduced by surveys of institutional buildings of all types.

A new junior high in Los Angeles is costing \$1,300,000 instead of the expected \$1,500,000.

A nationwide survey made by the *Modern Hospital* in May showed that "hospital building costs were down; material prices were down or softening; bids were closer and easier to get; there were no serious shortages of building materials or products; labor was more productive; the construction outlook was promising, and the outlook for financing hospital building was not too bad."

This tallies exactly with the Chicago area reports on the school construction picture.

Let's take the experience of Childs and Smith with the senior high school at Hinsdale, Ill., a two-story building in five sections (academic, industrial arts, cafeteria, gymnasium, auditorium) for 1300 students. Late last fall the bids came in, and they were well in excess of the bond issue which was to finance the project.

SIX MONTHS' WAIT

There was a six months' wait, the board gambling on the idea that prices would come down. All the original bidders were invited to rebid. The contract has now been let at \$1,685,000, and the building is going up, as the accompanying photographs show. This was a reduction of fully 10 per cent from the first bids. The high school will be completely plastered. Even so, because of careful planning and selection of materials, the cubic foot cost is 72 cents.

Thomas Higgins, director of building survey for the Chicago public schools, also is a building consultant. On two of his recent jobs, the Nazareth Academy, a girls' high school at LaGrange, Ill., and the new high school at Naperville, Ill., he reports a sharp drop: in one case almost 20 per cent in a year's time.

Mr. Higgins recommends a share-the-savings clause such as appears in both these school construction contracts. Through this clause the contractor agrees that any profit in excess



Progress photographs of . . .

FUTURE SAVINGS

as building costs decline

of an agreed amount (in these instances, 8 per cent) that can be effected in any manner during construction shall be divided between school board and contractors.

The ratio on the Nazareth Academy job was 75 per cent to the school board and 25 per cent to the contractors. On the Naperville High School job the ratio was 66-2/3 to 33-1/3.

On the latter job, the sum of \$40,000 was saved over the original estimate on a total of \$550,000 which represents the general contract.

"That is pretty near 10 per cent," Mr. Higgins points out. "And that was only on the subs. Asphalt tile was bid in December at \$8000 and was awarded at \$6500, for example. We have a figure on labor and material costs that isn't being pushed yet—for painters and plasterers."

Some authorities think that this share-the-savings clause may be the answer to the problem of whether to build now or to wait for possible further price declines. This type of con-

tract takes the real risk out of construction and, for that reason, may overcome school board reluctance to building at once.

Moving on to the third interview on current construction costs, we come to Perkins and Will, Chicago architects, who also note a decided change in the last six or seven months.

As Hal Burnett of Perkins and Will explains, during the period of rising prices out of which we are finally emerging, the following factors prevailed. Labor was in short supply, and the contractor could never be sure that workers of one trade would follow those of another without delay.

Materials were short and prices were rising so rapidly that the contractor had to bid high to protect himself. Many items had to be bought just short of black market prices. There was a great deal of piecemeal trucking to gather materials that were available. At the same time the contractor had all the construction contracts he could handle conveniently.

SHARE-THE-SAVINGS CLAUSE

From Typical Contract Prepared by Thomas Higgins

ARTICLE III. In consideration of the performance of the contract, the Owner agrees to pay the Contractor, from funds derived as proceeds from the sale of Bond Issues Nos. 1, 2 and 3 authorized for this purpose, as compensation for his services hereunder an amount not to exceed \$000,000 which shall be paid in accordance with and subject to the provisions embodied in the documents made a part of this contract.

ARTICLE IV. The contractor agrees that the amount stated in Article 3 represents a profit to him of \$00,000 (8 per cent) over and above all overhead, wages, salaries, fees, material and equipment costs necessary to complete the contract. No salary, however, shall be paid the contractor or any officer of his firm.

The contractor further agrees that any profit in excess of \$00,000 (8 per cent)

that can be effected in any manner during the construction of the project shall be apportioned on the basis of 66-2/3 per cent to owner and 33-1/3 to contractor.

ARTICLE V. The contractor shall check all material and labor entering into the work and shall keep such full and detailed accounts as may be necessary to proper financial management under this Agreement, and the system shall be such as is satisfactory to the Architect or to an auditor appointed by the Owner. The auditor and his timekeepers and clerks shall be afforded access to the work and to all the contractor's books, records, correspondence, instructions, drawings, receipts, vouchers, memoranda, etc., relating to this contract and the contractor shall preserve all such records for a period of two years after the final payment hereunder.



... Township High School, Hinsdale, Ill.

"Now materials are coming in steadily," Mr. Burnett reports, "so the contractor can schedule work in a known time. This means:

- "1. Less idle time for labor.
- "2. A shorter period in which supervisory personnel, like the contractor and architect, has to be on the job.
- "3. Materials are lining up on order and are available.
- "4. Because these have cut down the time it takes to complete a building, the money tied up in interest is less. A contractor can estimate costs of goods and labor more closely, provide less protection for risk, and can purchase supplies on a thinner margin. Also, other people are bidding seriously on the same job to get it.
- "5. Not so many people are bidding for short materials.
- "6. Labor is more productive."

How much farther will costs go

down and how fast? "Many savings have come almost overnight," Mr. Burnett points out; "the only additional cuts might be a decline in labor costs, but that is not a major factor.

"NO PANIC IN PICTURE"

"Prices of materials probably will not go down drastically. Materials are already in free supply but will decline in certain amount in the coming year. However, labor costs in these materials are pretty well fixed, because new plant facilities and equipment have been brought into play. There will be drastic cuts in materials only if there is complete cessation of building, because manufacturers, distributors and wholesalers are willing to take a loss in order to liquidate and stay solvent. A panic does not look to be in the picture at present because there is a solid volume of construction going on."

forego a sloping floor and fixed theater seats, but they indicate how such a hall could include far more of the minimal provisions for good seeing and hearing, backstage preparation and installation, dressing and make-up, and lighting—all at the same cost as the auditorium that omits all such provisions.

Basing their text entirely on the purpose of the structure, the authors have devised excellent tables according to types of production. Such topics as audience traffic (including parking, the movement of the audience into the foyer and lobby), the seating arrangement (sight lines, visibility), and ventilation are treated in detail. Although much of the material dealing with the stage-space relates more to the commercial theater, there is valuable information for the designer of the school theater in relation to backstage operation.

Too often the architect does not realize the minimum requirements for space behind and at the sides of the acting area; the desirability of a smooth back-drop; the need for adequate space for building and painting of scenery. He does not recognize the necessity of flexibility in the use of the proscenium and the acting areas in front of the apron. He forgets that the scenery has to be stacked against the walls and out of the way of the switch-board and heating units; nor does he always remember that there must be facilities for costume-making and dyeing. Dressing rooms should be accessible and properly lighted and ventilated. The authors provide for these needs in a practical way by presenting methods by which such specifications can be developed.

TWIN OBJECTIVES

Well planned marginal headings, many diagrams, excellent photographs of theaters here and abroad, a good index, and a lively and pointed presentation make this work a desirable acquisition for any college or high school library interested in the problem of theater and auditorium building. Recognizing the two objectives of the theater in the educational institution, namely, to teach theater and to teach other material by the theater, the book appropriately suggests that an exemplary theater plant is just as necessary for its subject as is the laboratory for the sciences.—FRANK PARKER, head of drama department, Principia College, Elsah, Ill.

Planning the Auditorium

THEATRES AND AUDITORIUMS. By Harold Burris-Meyer and Edward C. Cole. New York City: Reinhold Publishing Corporation, 1949. More than 300 illustrations. Pp. 230. \$8.

FOR the college or high school drama department planning an auditorium or attempting to remodel present facilities, this book offers excellent advice and information. It considers the question of auditorium and stage-space from two essential points of view: that of the audience and that of the producer or actor.

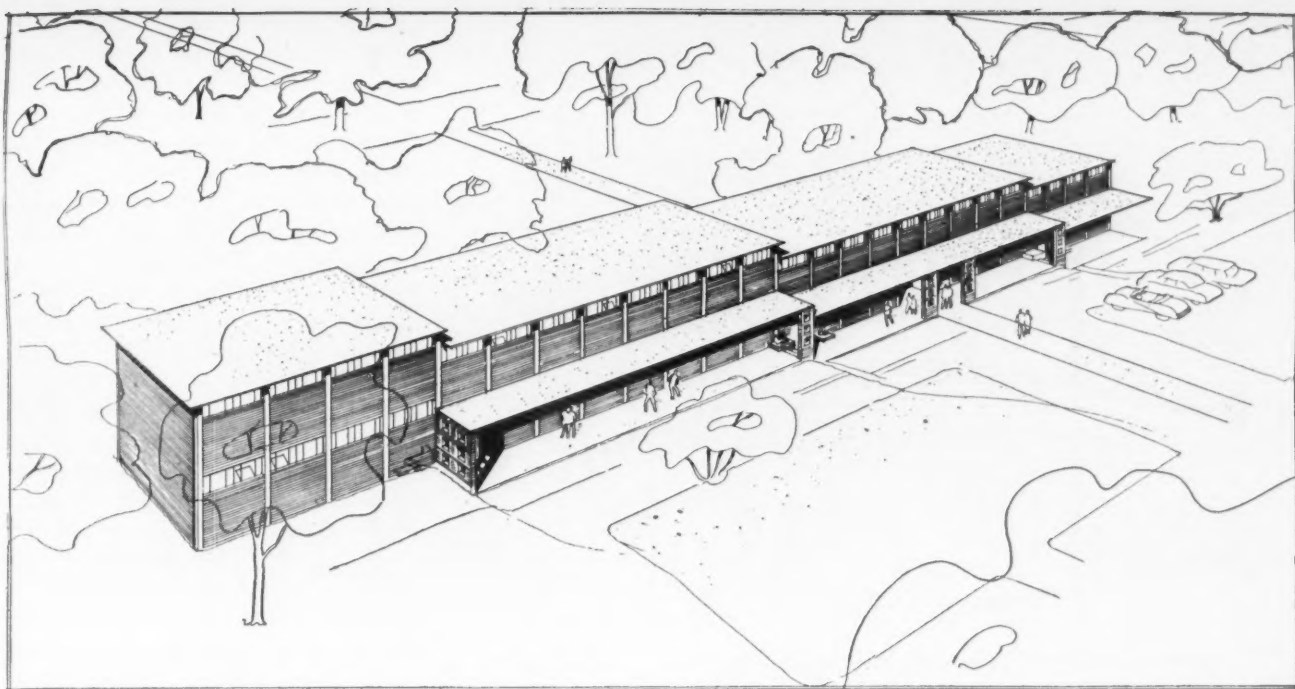
The purpose of the structure is the primary consideration and is well thought out on the basis of actual experimentation and of consultation with specialists in the theater. Burris-Meyer is associate professor and director of research in dramatic arts and sound in the theater at Stevens Institute of Technology, while the co-author, Mr. Cole, is associate professor of the drama department at the School of Fine Arts, Yale University.

Describing the existing conditions of auditoriums in many high schools and colleges, the authors list the shortcomings: "Audience comfort is less than in the standard commercial theater. Seats are hard and cramped, floors often flat. Sight lines are usually very bad. Booming echoes lurk in the nests of architectural gingerbread. The

school ventilation system is often shut off at night when the play takes place. Access from the street is often difficult (three flights up)."

The writers further describe a typical high school stage with its lack of wing space, depth and "flying" facilities and its hardwood floors, and shops located at a remote distance from the stage. Blaming imitation of the poorly designed commercial theater as well as the opinion of the architect that amateurs can get along with poorer facilities than can professionals, they make the significant comment that "half a theater is as bad pedagogically as half a play." The inevitably shabby production, they conclude, as well as the condescension of the community toward the production will result in poor education as well as in poor entertainment.

The inadequacy of many a college and high school auditorium is caused by the fact that most of them have been designed for nontheatrical purposes (assemblies, concerts, commencements) and have been planned by members of the faculty or administration who are not acquainted with the processes of theatrical production. The authors recognize that the hall must often be used for "dancing, basketball, girl scouts, bingo, bridge and the harvest supper," and consequently must



LITTLE ROCK JUNIOR COLLEGE

JUNIOR COLLEGE, *built at low cost, uses*

"entry system," eliminating corridors

TWO years ago President John A. Larson of the Little Rock Junior College was told that he would have to move out of the buildings the school occupied. This word came to him when the college was at a peak enrollment, having jumped from 400 in 1940 to 1200 in 1946.

The buildings were owned by the Little Rock school board. Since it, too, was faced with classroom shortages, the board was compelled to serve notice on the junior college to move out. While the college enjoys the income from a liberal endowment bestowed by the late Gov. George W. Donaghey, this could not be used for capital investment according to the terms of the endowment.

GIVEN IDEAL SITE

A group of public-minded businessmen met with the school board to see what could be done about a new plant. Raymond Rebsamen, Little Rock businessman, gave the school an 80 acre tract, well located and beautifully wooded, an ideal site for a new school. A three-year campaign was started to

EDWIN B. CROMWELL
Ginocchio & Cromwell, Architects
Little Rock, Ark.

raise \$750,000, but within a year the goal was in sight. As architects, we were instructed to complete working drawings and take bids for the first two units of the permanent school. These were to provide 25 classrooms.

Meanwhile, the college obtained a hospital ward, mess hall, and three barracks buildings from the U.S. Army air field at Stuttgart, Ark., and, with the help of the Federal Security Agency, had these installed on the new site as temporary science and engineering classrooms, cafeteria and library. These were placed where they would not be in the way of future permanent improvements.

Plans were completed on the two classroom units, and the contract was awarded in October 1948, on a low bid of \$236,000. Seven bids were received, the average being \$250,000. Work was started in November. The

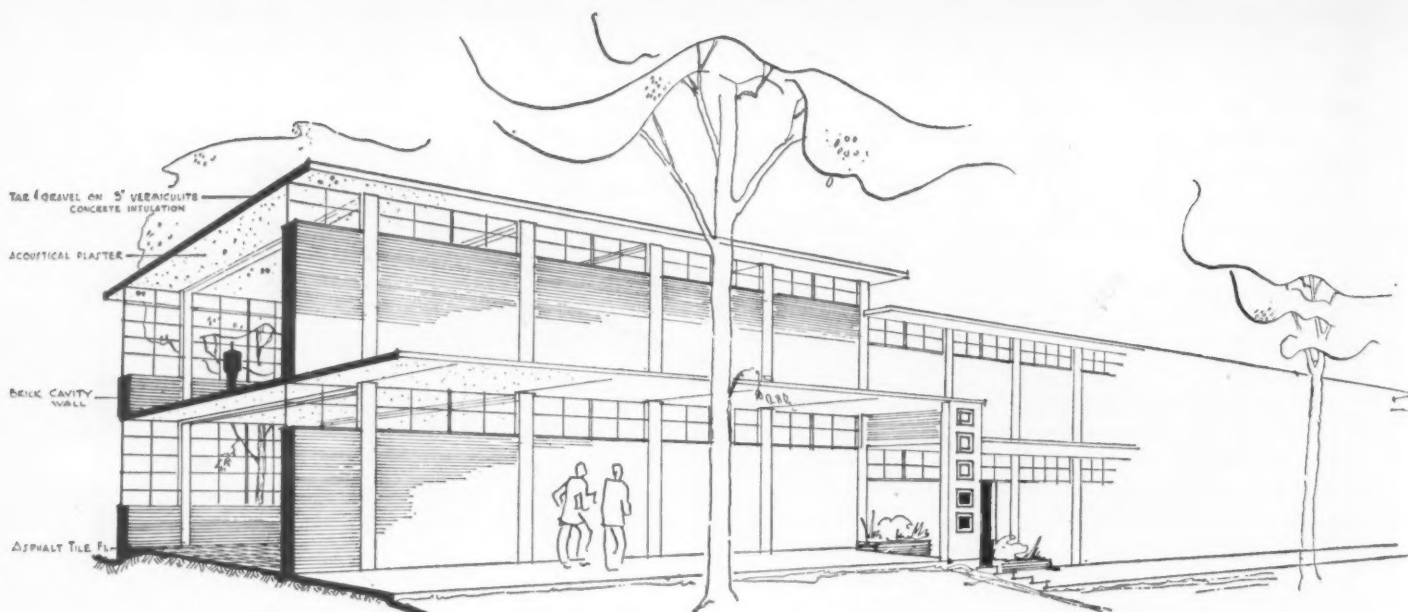
cost was amazingly low for fireproof construction, being \$9440 per classroom and \$6.30 per square foot, exclusive of landscaping, site improvements, equipment and architects' fees, but including plumbing, electric wiring and fixtures, and heating.

This low unit cost was due in part to the use of a simplified reinforced concrete structural system, based on a modular design, in which a standard architectural projected window size was used as the module. Costs also were reduced by simplifying interior and exterior finishes.

FLANK LARGE COURT

The accompanying drawings show these first two classroom units flanking a large court. A future building, housing the library and administration offices, will be on the main axis of this court. Classroom buildings face north and south, giving each classroom a large glass area on the north and small high windows on the south.

North classroom light was determined to be best because it produces an even intensity of lighting. It will



Classroom buildings face north and south, one on either side of a large court. Each classroom has

a large glass area on the north and small high windows on the south, providing through ventilation.

eliminate the need for shades, blinds, baffles or awnings.

The college has a full summer session, and large east and west windows would make the rooms unbearably hot. The small south windows will provide through ventilation (local prevailing breeze is from the southwest) and bilateral lighting.

The "entry" system is being used, each building having three entrance stair halls, around which are grouped four classrooms, a teacher's office for each two classrooms, boys', girls' and teachers' rest rooms. Each entry has its own separate heating system. Entries to each building are connected by a walkway, covered by a cantilevered concrete roof slab.

During the preliminary stage of planning, sketches on this system were compared with sketches of the typical corridor plan with classrooms on each side. It was found that the entry system reduced the finished area of the building by about 20 per cent, and since corridors require the most expensive finishes, such as terrazzo floors and tile wainscots, we felt that their elimination was much to be desired.

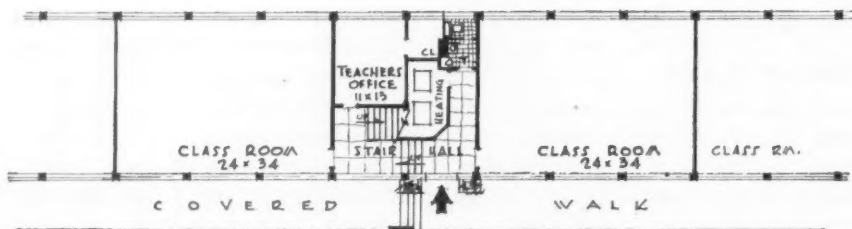
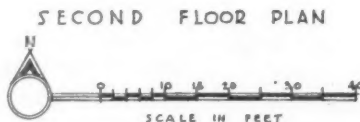
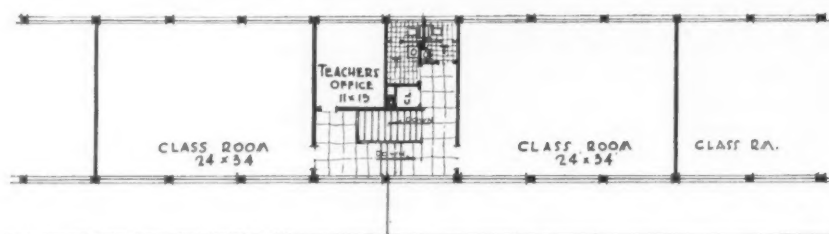
Each building has three entrance stair halls, around which are four classrooms, a teacher's office for each two classrooms, boys', girls' and teachers' rest rooms. Entries to each building are connected by a walkway.

The two principal peeves from school administrators about their classroom buildings seem to be (1) the difficulty in controlling light and ventilation in classrooms, and (2) the maintenance and control of long corridors. By using large north windows, with south windows for supplementary lighting and ventilation, and by eliminating corridors, we hope to avoid these complaints.

The buildings are constructed of reinforced concrete frame with uni-

form column spacing throughout. Concrete beams, supporting floor and roof loads, run across the buildings with simple slabs spanning the space between them. This system permits the elimination of the usual spandrel beams over windows and allows the windows to extend to the ceiling, avoiding the usual shadow over the window from reflected light.

Exterior walls, resting on concrete frame, are of the cavity type, consisting of two 4 inch brick walls separated by



TYPICAL ENTRY PLAN

a 2 inch air space. Walls consist of panels fitting between concrete members. Brick panels project slightly on the exterior and are flush with concrete columns on the interior. Interior finish of classrooms and stair halls will be light pink brick, which will reflect about 50 per cent of the light striking it. Ceilings throughout will be acoustical plaster, sprayed flat white to obtain maximum reflectivity. Chalkboards will be natural slate.

Floor finish is to be asphalt tile in classrooms and offices. In stair halls floors will be cement with colored abrasive added. Toilet rooms will have ceramic tile floors and tile walls to the ceiling, an added cost felt to be justified because of ease of maintenance.

Heating and ventilating will be accomplished by the use of two direct fired gas forced-air furnaces in each entry, or one for each two classrooms. The system will use up to 50 per cent fresh air and will introduce the air to rooms through concealed ducts. Each classroom will be equipped with thermostatic control. This system was selected because of its low first cost. While depreciation will be relatively high, percentagewise, compared with that of a central heating system, unit replacements will be easy and inexpensive.

LIGHTING IS INCANDESCENT

Light fixtures will be of indirect type, suspended fixtures with concentric rings and 500 watt silvered bowl incandescent lamps being used to produce from 25 to 30 foot-candles in service. This design was employed to deliver a uniform level of illumination with an optimum condition of relative brightness. The incandescent silvered bowl source was selected primarily because of its low first cost and low maintenance cost.

Clocks and bells will be controlled electronically from a master system through the 110 volt lighting system.

Other buildings proposed for construction soon are those for physical education, auditorium and fine arts, and library and administration. The last named will dominate the campus, with two wings connected by an open colonnade on the main axis. Ample space is available for additional future expansion. The area to the south will be reserved for housing when and if it is needed.

Neil Hamill Park was the site planner, and W. Dewoody Dickinson, the structural engineer.

Flying Classroom Members Describe

CURRENT PRACTICES IN PLANT CONSTRUCTION

***Improvements and mistakes in design
and materials observed during visit
to building projects in three states***

MILDRED E. WHITCOMB

SCRATCH a schoolman on the noggin, and out of his brain flies a blueprint. Or tap the administrator's knuckles, and you release his clutch on a balsa-wood model of a new plant, detailed but probably not financed.

Breathes there a school administrator who hasn't a building project on his hands, on his mind, or in his dreams! If such there be, mark him down as the dear departed superintendent of Ghost Town public schools. When the day comes that Private Capital, abetted by Public Relations and Dorothy Draper, decides to restore Ghost Town to its old or to greater glory, that's the day our deceased schoolman will reassume corporeal form. Sloughing off his sweeping pinions in such fashion that, transmuted, one wing falls on either side of the old red brick schoolhouse, he will miraculously add the required cubage to accommodate community square dances, P.T.A. capers, and demonstrations of group dynamics.

VISITORS SEE 13 SCHOOLS

Last February a band of schoolmen took to the air as members of the A.A.S.A. Flying Classroom. Their interest was in planning and construction; the trip lasted five days, with airport landings and motor tours in three states.

The first call was at G. E. Lighting Institute in Nela Park, Ohio, and

the final procession down corridors was at Drexel School, Cicero, Ill. As usual, the Flying Classroom had as its chief pilot Carl M. Horn of Michigan State College, which was the co-sponsoring institution.

AFTER THEY PONDERED

Weary with fatigue but alive with ideas, the schoolmen reached home base and took time to ponder over what they had learned that was worth applying in a local building situation. After they had pondered a spell, The NATION'S SCHOOLS asked them some specific questions. Their answers are the basis of this report.

The 30-odd men [Compositor: Omit that hyphen and I'm terminated] were largely superintendents, with an occasional board member, principal, architect or engineer adding spice to the administrators' punch. They visited Ann Arbor Trail Elementary School, Detroit, E. G. Sudman Elementary at Allen Park, Milan Elementary Schools at Milan, Dr. Zina Pitcher Elementary School in Detroit, Our Lady of Sorrow Elementary School at Farmington, and the George N. Bentley High School in Livonia Township, all in Michigan.

Then they flew to Chicago where they were motored to the Clyde Lyon School at Glenview, Harper School at Wilmette, Kildeer Countryside School at Longrove, Palatine Junior High School at Palatine, Park Ridge School

Bilateral lighting and square classroom win approval of Flying Classroom. . . . One-story building preferred for elementary schools. . . . Teachers winning battle for more storage space. . . . Improvement in classroom lighting voted most significant trend in schoolhouse construction in recent years. . . . Superintendents ask for more improvement in ventilation and locker designs. . . . Audio-visual construction creates need for translucent drapery or window shade. . . . Other topics needing more attention are: ceiling heights, financing, fluorescent vs. incandescent lighting, relative merits of building materials, and economical remodeling of old buildings.

at Park Ridge, Lincoln School at Bellwood, and Drexel School in Cicero, all in Illinois.

One evening there was a seminar; every day there was a recap of activities. At the end of the fifth and final day, the group seemed fairly well sold on one-story construction, bilateral lighting, square classrooms, larger sites, colorful interiors, and bigger and better storage areas. Much—but not all—of what they saw made sense.

LIGHTING IS CHIEF TOPIC

Improved technics in lighting drew more comments from the group than any other one subject, replies to TNS questionnaires reveal.

Bilateral lighting, which makes feasible the square or nearly square classroom now coming into high favor, will get early consideration in the present and future building programs of these schoolmen.

The visitors commented on the greatly enlarged window areas in many of the schools visited. One kindergarten teacher told the group that her room has too much glass. She does not want fenestration extending to the floor because the youngsters endanger the glass and the glass endangers the youngsters. About 15 per cent of her floor space was lost because the children had to be kept away from the low windows.

There was favorable comment on the wider use of directional glass block to equalize the light intensity at classroom desk level. Principal LeRoy J. Knoeppel of the Township High School, Arlington Heights, Ill., would

use regular glass block partitions to separate classrooms, "thus improving all light and counteracting glare."

Arguments won't soon cease as to the relative merits of fluorescent and incandescent installations for artificial lighting the schoolhouse.

Supt. Lyle K. Klitzke of Nappanee, Ind., is certain that "fluorescent lighting soon will replace incandescent, especially where 30 foot-candles are used."

However, Supt. T. N. Lamb of Bendle High School, Flint, Mich., argues that "incandescent light with indirect lighting fixtures . . . gives approximately the same amount of light as the fluorescent tube and is more economical."

More than one of the visiting schoolmen sounds a warning that some new lighting installations are getting so complicated as to create heavy maintenance and repair expense and are receiving dollar emphasis that could well be split among ventilating, heating and acoustical control, particularly ventilation.

DIRECT USE OF MASONRY

Most of the flying schoolmen were enamored of cinder block construction as an interior wall finish. They liked the saving of the time and expense required for plaster walls, and they reveled in the nice use of color made possible by applying cold water or casein paints.

"Color offsets the danger of cheap appearance," commented C. E. Larson, superintendent of West Side Schools, Aurora, Ill.

Said Supt. Leonard L. Bestrom of Harbor Beach, Mich.: "I think it inadvisable to use semigloss oil based paint on cinder block classroom walls for this type of paint seals the pores and eliminates much of the acoustical quality of the block."

On the whole, the group regards one-story buildings as superior to the multistoried type, particularly but not exclusively for elementary schools. Most of them expect to follow this mode. In their new one-story buildings, look for acoustical ceilings and light colored asphalt tile floors. Watch, too, for metal door and window frames. They want to wait a while to see what happens to the asphalt tile on the gymnasium floors they observed in some new buildings.

Dear to all hearts was the more lavish but still insufficient use of storage space. One school administrator was gentleman enough to admit that this new interest in storage space is the result of bringing the classroom teacher into the planning team.

In answering The NATION'S SCHOOLS questionnaires, the men almost uniformly commented on the storage walls, cupboards on wheels, cupboard partitions, walk-in storage, gymnasium and kindergarten locker ideas noted in the best of the 13 schools they visited.

The most impressive sight one principal saw on the entire tour, he relates, was the piano cupboard built into the school gymnasium. He suggests that architects go a few steps farther and provide storage space for radio recording equipment, visual aids equipment, and also community equipment and supplies in gymnasiums and cafeterias often used by the public.

Few of this group of travelers failed to comment on the tables that fold into the walls in several Detroit gymnasiums. In a flash, as the lunch period nears, the tables are pulled out and the room is converted to cafeteria use.

Multipurpose rooms, whenever encountered, called forth compliments and will find many imitators in the schools to be designed under this group.

RADIANT HEATING HOT SUBJECT

Radiant heating was discussed at every turn; most of the men were from the North, and some of these were doubtful as to whether it is wise to follow this trend in a severe climate. The various methods of direct heating

and ventilating without interroom exchange of air was commented on favorably by one class member.

There was a general feeling that more thought and experimentation should be done on ventilation. In fact, the principles of modern ventilation seem not well understood, probably because of the technical terminology. When an engineer discussing supplementary convectors keeps looking at a radiator, gradually there is a thought transference. But suppose there is no radiator in sight. This simple example is a personal one, no implication being made that school administrators are not on chummy terms with supplementary convectors.

The trippers were asked if they had any suggestions for manufacturers. They did. They want: (1) better ventilating equipment; (2) improved locker design, with no waste space; (3) a less expensive wainscoting material; (4) a translucent drapery or window shade that will admit sufficient light yet screen out glare; (5) a rigid, foolproof mounting for fixtures in toilet and shower rooms.

Supervising Principal John W. Zorella of the public schools of Manville, N.J., suggests that manufacturers "study actual use of their materials and equipment, watching the pupils in action and conferring constantly with teachers."

HOW TO CUT COSTS

Also asked for effective ways of cutting construction costs, the schoolmen emphasized modular construction; wider use of the multipurpose room; use of precast materials; great standardization of parts; elimination of parapet walls through overhanging roofs; substitution of other materials for plaster; single-story construction to eliminate need for heavy steel; use of rubber and asphalt tile floor coverings as "cheaper to maintain; also it is easier to replace worn-out sections."

Supt. M. J. Beiser of Eaton Rapids, Mich., remarks: "I felt that when too much cutting down on construction costs had been made, it decreased the efficiency of the building."

"Some practices have been permitted in the name of economy," remarks Clark R. Ackley, architect of Lansing, Mich., "that may prove much more expensive in the long run, such as not providing easily cleaned and maintained surfaces where they have direct wear from children, namely, floors, doors, cases, lower walls in

THANKS TO THESE CORRESPONDENTS	
RESPONDENTS	SCHOOL OR OFFICE
Clark R. Ackley	Architect, Lansing, Mich.
M. J. Beiser	Superintendent, Eaton Rapids, Mich.
Leonard L. Bestrom	Superintendent, Harbor Beach, Mich.
Peter E. Brender	Engineer, Wayne, Mich.
Elwyn R. Dell	Superintendent, Fremont, Mich.
A. L. Hagen	Superintendent, Dickinson, N.D.
Ray H. Hamilton	Superintendent, Portland, Mich.
A. G. Haussler	Principal, West High School, Aurora, Ill.
J. E. Holmes	Superintendent, Spring Lake, Mich.
Lyle K. Klitzke	Superintendent, Nappanee, Ind.
LeRoy J. Knoeppel	Principal, Township High School, Arlington Heights, Ill.
T. N. Lamb	Superintendent, Bendle High School, Flint, Mich.
C. E. Larson	Superintendent, Aurora, Ill.
John Lemmer	Superintendent, Escanaba, Mich.
Herman H. McGuire	Superintendent, Carter County School District, Grayson, Ky.
R. H. McLean	Assistant Superintendent, Midwest City, Okla.
Godfrey T. Norman	Superintendent, Reed City, Mich.
L. E. Schmidt	Superintendent, Clarenceville Public Schools, Farmington, Mich.
Donald J. Sprik	Board Member, Lake City, Mich.
G. E. Thompson	Superintendent, Kermit, Tex.
Russell F. Tyndall	Superintendent, Lake City Rural Agricultural School, Lake City, Mich.
A. C. Van Wyk	Superintendent, Bismarck, N.D.
John W. Zorella	Supervising Principal, Manville, N.J.

halls, toilets and classrooms. In some cases considerable emphasis was placed on architectural impressions and imagined social expressions which no doubt will prove to be expenditures not quite warranted by most school districts."

Did those who made the school journey like all that they saw? That question answers itself. Even when aided by an educational consultant, the school administrator, the board, the teachers, the children, and the parents, no architect has designed the perfect school building even to meet local conditions.

The schoolmen wanted, in some cases, (1) more play area; (2) a larger gymnasium—for community use; (3) a less elaborate exterior; (4) no fireplaces, since inquiry showed they were not used; (5) more cupboard and storage space; (6) more space for administration; (7) large sites for future expansion; (8) parking areas and sidewalks; (9) better ventilation; (10) possibly general toilets for each sex after first grade, "not individual classroom toilets for who keeps these clean?"

STILL PERPLEXED

Finally, members of the "flying class" were asked to list some problems that still perplex them now that they have thought through the whole experience and are ready to apply the ideas to their own building programs.

They expressed themselves as bothered chiefly about these matters:

1. How to finance a new building program.
2. Radiant heating *vs.* convection heating.
3. Basic needs for ventilation.
4. Ceiling heights: 10 or 12 feet?
5. How to sell schools to public.
6. Fluorescent *vs.* incandescent lighting.
7. Relative merits of concrete *vs.* brick and tile buildings.
8. Advisability of blacktopping play areas.
9. Small area schools *vs.* large centralized schools in the average metropolitan suburban area.
10. Provisions for visual education in classroom design.
11. How to design secondary school classrooms for group living and teaching.
12. Construction that will prevent moisture from penetrating walls during driving rain.
13. Type of paint for interiors.
14. How to capture the new look in old buildings.
15. Type of floor for gymnasium.

All the men agreed it was a good trip, whether it fell into the jaunt, junket or school journey category. Said Supt. G. E. Thompson of Kermit, Tex.: "This was the finest, most practical experience I ever had. It is invaluable in our \$2,000,000 building program."



What effect has the size of district on

PUPIL TRANSPORTATION

THE redistricting programs now underway in about a third of our states will make transportation a factor in whatever is done. This question of who should administer transportation is certain to come increasingly into the focus of attention.

In the United States we have, in general, operated upon the principle that governmental functions should be carried on as near to the people as economy and efficiency permit. Some problems of government can be dealt with economically and efficiently only by the state; others may be handled best by the county; still others by smaller units. Even the federal government has a growing list of responsibilities that we think it can deal with most effectively.

WHAT ARE THE DUTIES?

In applying this principle to pupil transportation two analyses should be made: (1) What are the various types of duties to be performed? (2) Which unit of government is best able to perform each type of duty?

Some duties it is fairly easy to allocate. For example, the determination of what is a "reasonable" cost and the equalization of the financial burden for transportation are clearly responsibilities of the state.

However, can best results be obtained when the state purchases buses for the various school districts? We don't yet have the evidence that enables us to make a confident judgment.

Who can best select the drivers? Clearly the state cannot; it is too far away from the job and the persons available for it. It is conceivable, however, that the state may set up general standards for the selection of drivers and may even decide that some form of certification is desirable. Whether anything of that sort happens doubtless will be partly determined by evidence as to the competence of the drivers chosen by local boards.

At present we are settling these and similar problems largely on the basis of general observation, coming to one decision in one state and to another decision in another state. As time goes on, it is almost certain that we shall subject these allocations of responsibility in transportation to increasingly rigid analysis and shall undertake to make objective evaluations that require the use of scientific method.

However, to get on with the problem of determining which of two types of control is preferable, we must start with some assumptions about the re-

JULIAN E. BUTTERWORTH

Professor of Educational Administration
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sponsibilities to be undertaken locally—by the individual school district or by the "enlarged" district. By an enlarged district is here meant a county or some area of comparable size. The small district may be any subdivision of the county.

There would be required of one or the other of these units the assumption of all responsibilities not carried by the state. There would be involved the determination of transportation policy: the maximum haul (in terms of either time or distance); the pick-up points; whether the service should be provided by a district owned or by a contract system; how vehicles should be selected and paid for. These policies must then be administered. This involves such problems as: laying out the routes; selecting the equipment; inspecting and repairing vehicles; selecting, supervising and training drivers; keeping cost accounts and other essential records.

In the county-unit states, transportation is naturally considered to be a function of the county board of education. In at least one state that does not have a county unit system the county operates the transportation program. This is true in Edgefield and Lancaster counties in South Carolina. It may be true of other counties in that state and is probably true of some counties in other states.

THREE CRITERIA INVOLVED

A transportation system must be *safe* or as safe as it is humanly possible to make it. Most of us would probably accept this as the most important consideration.

It also should be *efficient*. It should get pupils to school in comfortable buses in the least time possible; the drivers should be persons who are able to maintain discipline, are neat and clean in person, are courteous and friendly, have no objectionable habits, are competent in meeting driving

problems, and the like. The efficient system will be as regular in its service as possible. Its buses will be adequate as to capacity yet not larger than are needed and will be regularly and effectively inspected.

WHEN IT COMES TO COST

The third criterion is *cost*. That type of control will be best that provides a safe and efficient service at the least cost. Let us discuss this first.

Cost Factor. One might expect that the enlarged unit¹ would give lower costs for these reasons:

1. The larger unit will usually be able to purchase supplies and equipment more cheaply because of the larger quantities involved. For instance, the larger the number of vehicles involved the easier it will be to introduce a purchasing program staggered to make uniform demands upon bus factories, with consequent savings. It should be recognized, on the other hand, that the enlarged unit might do the purchasing for the constituent districts without taking over the administration of the entire program. Arrangements also might be made so that small districts could participate in a state contract for maintenance materials.

2. The enlarged district should be able to lay out routes that will require the shortest possible haul.

3. The enlarged unit should be able to provide major repair services at one center more economically than the constituent districts could provide them.

4. In building garages the large district could probably make some economies by constructing larger storage units.

5. In the large district there would be, usually, a sufficiently big job to justify the employment of a supervisor who, because of his superior knowledge, could bring about more efficiency or more economy or both.

6. With the larger number of vehicles in the enlarged unit, greater flexibility becomes possible in the allocation of vehicles to routes so that full capacity or close to that may be maintained. In cases of breakdown or other emergency, the larger pool of vehicles and drivers should make it easier to get service quickly.

¹Some useful recommendations regarding the personnel, garage facilities, and equipment necessary for bus fleets of various size may be found in Bulletin No. 2, 1948, Office of Education, entitled *School Bus Maintenance*.

Comparison of Transportation Costs in States With Small and Large Districts

STATES WITH SMALL DISTRICTS	NO. DISTRICTS	TEACHERS IN 1 ROOM SCHOOLS	PUPILS TRANSPORTED	ANNUAL COST PER PUPIL TRANSPORTED
Illinois.....	11,998	38.0%	8.6%	\$56.28
Iowa.....	4,856	46.0	18.5	31.61
Minnesota.....	7,680	44.0	22.0	46.31
Wisconsin.....	5,055	43.0	11.1	47.12
STATES WITH LARGER DISTRICTS				
Indiana.....	979	5.4%	60.1%	\$30.34
Ohio.....	1,605	3.4	50.4	25.45
North Carolina.....	170	4.4	38.9	8.66
Washington.....	838	4.1	58.2	22.90
United States.....	108,880	20.5	29.3	24.42

So runs the argument. But what do the facts show? A search of the recent literature revealed almost nothing on this problem. A request to the Office of Education and to several state directors of transportation produced little information. The only specific study I learned about was made in New York State.

INTERMEDIATE DISTRICT STUDIED

In the study² of the intermediate school district in that state, from 1944 to 1947, analyses were made of the probable effect upon costs *if the intermediate district instead of the local district* were given responsibility for the transportation program.

Three of the 65 proposed intermediate districts were studied. In each case investigators went into the field, recorded all essential data about each route and its cost, analyzed the possibilities of rerouting in terms of the larger area and computed both the extra expense that might be involved and the savings that could be expected.

In these three areas alone larger unit control would, it was estimated, save 97,675 miles of travel with a dollar saving of \$26,860, or 22.8 per cent of the total cost of transportation.

This study did not, however, cover all the factors that would be involved. It did not include the expense for a supervisor of transportation. At a guess, this might run as high as \$3500 per area, amounting in all to about 40 per cent of the estimated savings. On the other hand, the study did not include even an estimate of what might be saved through central purchasing of equipment and supplies and

through making major repairs at a central garage.

The study does indicate clearly that, under New York conditions at least, substantial savings could be made by coordinating the transportation systems of the several central and other districts. This would result in the reduction of much overlapping and of other inefficiencies in routing.

The National Commission on School District Reorganization presents some evidence on this matter. It compared four states that have many small districts with four states that have relatively few small districts. The data in the accompanying table are abstracted from the commission's report.³

With the exception of Iowa in one group and Indiana in the other, the differences in cost between the two groups are significant. Doubtless factors other than the size of the districts enter in, yet there seems to be ample justification for the conclusion that as the number of school districts and the number of rural teachers in one-teacher schools decrease the larger percentage of pupils who are transported results in a lowering of the per pupil costs for transportation.

NEED FOR COMPARABLE DATA

In order to get comparability of data for the purpose of determining what effect the size of the administrative unit has upon transportation costs, at least four considerations must be kept in mind.

1. The same types of transportation service must be included in the cost figures. Two kinds of service should be distinguished: (1) routine transportation—that is, transportation from home to school and back, and (2)

²Beebe, B. Frank: *A Study of Transportation in Central Rural and Union Free Schools in the Intermediate District Study*. Ithaca, N.Y.: Library of the College of Agriculture, Cornell University, 1947. 5:80-118.

³Dawson, Reeves et al.: *Your School District*. Washington, D.C., National Education Association, Department of Rural Education, 1948. Pp. 98, 99, 286.

transportation for other educational services, e.g. taking students from the school to visit agricultural or other projects, taking the seniors on an annual trip to Washington, or taking an athletic team to another school.

Obviously, if one school system reports only routine transportation while another reports nonroutine also, the costs are not comparable. Or, if both schools report both types of costs and one has a much larger program of nonroutine transportation, the cost results are not comparable unless they are segregated according to type.

2. The data should be for "costs" rather than for "expenditures." A district purchases a bus. If cash is paid and all of it is charged to the one year, the item is an "expenditure." If, however, the average depreciation for 10 years is computed and the charge for any one year is only the depreciation rate, that charge is a "cost."

"Expenditures" include *all* money paid out during the year. A "cost" represents payment for services received or materials consumed during the year, whether they are paid for during that year or during some other period.

In the five states presenting such data, only one indicated definitely that a depreciation figure was being used. The rate used was 15 per cent. A similar problem arises when equipment, such as tires, that normally lasts for more than a year is purchased or when gas and oil are purchased and paid for in one year but are used during the following year.

In the New York study cited previously, there is a weakness because the study had to utilize expenditure items as required by the state. Costs were not available.

WATCH DEPRECIATION

3. The same items of cost must be included if unit costs are to be useful for comparative purposes. Probably the most important item to watch is depreciation. Not only should that item be included in the costs but also the methods of computing it should be comparable.

Administration is another item that is nearly always neglected. One theory is that when the regular administrator takes responsibility for the transportation program his salary should be charged in its entirety to the general school account.

However, if one is trying to determine whether district owned transpor-

tation is cheaper than the contract method, the figures will be erroneous unless they include the share of the administrator's salary that represents his service to transportation. Contract transportation will, of course, include administrative costs.

4. The unit cost not only must be figured upon the same items but also must be computed on the same basis. In one state the annual cost "per transported pupil enrolled" was \$16.96 in 1946. The cost "per pupil in A.D.A." was \$21.46, a difference of 20.9 per cent. In three other of the five states only one unit cost is given, the "per pupil transported." One who does not know just how this figure is computed cannot know just what it means. Uniform procedures need to be used.

Obviously, an annual unit cost based upon a 170 day term cannot be compared with that for a 180 day term until the two costs are reduced to a common denominator. One way to do so would be to use the cost per day instead of the cost per year.

Comparability of data has been emphasized because it is important in dealing with almost any problem connected with transportation. For example, we cannot say whether contract or district ownership is the more economical unless the data are for the same service and are the actual costs based upon the inclusion of the same items and unless the unit costs are identically computed.

EFFICIENCY FACTOR

Even if we had true costs determined on a comparable basis, we still would lack an important fact. It is not only what one pays for an object or a service that is important; what one gets for what he pays is also significant. None of the state reports investigated gave any measure of the degree of efficiency represented in its transportation systems.

It should be practicable to develop a scoring device for transportation that would be just as valid and just as reliable as a score card for school buildings. In fact, one such score card has been developed for transportation.⁴ It has not been so widely used as it deserves, probably largely because it came out just as the war began.

What this evaluation device does

⁴Ruegger, Virgil: *Evaluating Transportation Service in Butterworth and Ruegger, Administering Pupil Transportation*. Minneapolis, Educational Publishers, Inc., 1941. Pp. 47-92. This chapter is available separately as a reprint.

is to analyze the elements in a transportation program under six major categories: regularity of service; convenience; comfort; security; conveyance; operating personnel. These are then broken down into 34 subordinate categories, each dealing with an important aspect of the program. For each a standard is suggested, together with the method that should be used in arriving at the score. There are obvious limitations in this measuring device, yet it is a first step and, as such, is of very real significance.

By means of a scoring device such as this, costs may be interpreted in terms of the efficiency of the program.

Safety. Which system of control gives the greater safety? Here again I have been unable to discover factual evidence except in one state. There information is given as to the number of accidents, the number killed, the number seriously injured, and the value of the property damage.

COMPARATIVE DATA NEEDED

Uniform Collection of Basic Data. This is essential. What may, in the preceding sections, seem to be a negative approach to our special problem should rather be considered as a constructive approach. All of the limitations in data useful for answering our question may be overcome by cooperative effort and cannot be overcome otherwise.

That effort can be most usefully directed by the Office of Education, and for several years it has been at work on the problem. Its last report is worthy of careful study.⁵

If the recommendations in this report were adopted and if each state then made its data available, we should have the kind of information that would enable us to draw sound conclusions not only as to the desirability of large or small district control but also on other equally vital problems.

This article has not been able to answer confidently the question it proposes. Such objective evidence as we have indicates the enlarged district is better, but that evidence is so meager that I am unwilling to admit that we yet have the true answer. If, however, this discussion stimulates administration to take certain essential steps, this and other important transportation questions can be answered.

⁵Uniform Records and Reports for Pupil Transportation (first revision). Washington, D.C., Office of Education, (undated), p. 27.

INDUCTION WEEK *looks like hard work,*

but once the teachers have taken part in it,

they won't want school to open without it

CHESTER F. MILLER and CHARLES C. COULTER

Superintendent of Schools
Saginaw, Mich.

Director of Occupational Training
Saginaw, Mich.

SCHOOL opened with a bang!" "Things got off smoothly to a nice even start. There was no trouble, no friction, and we learned something new."

These and many similar statements lead us to believe that our preschool conference is worth while. For almost 20 years we have experimented with various types of such meetings. Each year citizens and faculty members offer new and better ideas. Each person who attends the conferences takes an active interest in the building of the week's program.

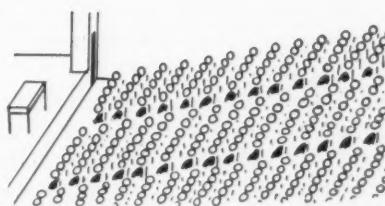
The number of days needed for a preschool conference depends entirely upon the size of the community and the central theme of the meetings. Our city is ideal in size for a full week of such activities.* Whatever the length of time utilized, we have found that it pays off in improved teacher morale and preparedness.

CENTRAL THEME FOR WEEK

Our experience indicates that such a series of meetings should have some theme or core upon which all the activities of the week can center. We recommend a main speaker or specialist, supplemented by other speakers, conferences and panel discussions, with all speeches and discussions planned around the central theme. Planning parts of the program so that large numbers may participate in them tends to create interest and to enliven the whole program.

The problem of finding a core is

*Saginaw, Mich., is a city of 100,000 population, a highly industrialized center serving an outlying rural area of fertile farm land. It has some of the advantages of a city plus some of the advantages of a small community.



not a difficult one. Often a central theme will be suggested by business or lay people or will arise from problems that develop throughout the year in the school system proper.

One year the theme of visual aids was chosen because of the establishment of a visual aid library in our city. One of our most interesting meetings included talks by state C.I.O. and A.F.L. officials, manufacturers, the board of commerce president, and the retail merchants' president, all on the same platform. On another occasion, when the theme was "Vocational Education and Work Experience," we obtained speakers from industry and business.

Another theme, "Remedial Reading," stemmed from situations and discussions that had come up over a period of years. An outstanding specialist gave two lectures and demonstrations on each of two days. Conferences of teachers, divided into small groups, were held before, between and after these lectures.

The central theme seems to give the whole series of induction meetings a definiteness of purpose. Minor programs, conferences and sessions for teachers, principals and others need not adhere strictly to the theme, but in general they should be related to it in some way.

The whole series should be set up to move with frictionless speed. Each meeting should begin at the scheduled time and never should be permitted to continue beyond the allotted time. The quickest way to kill enthusiasm for a scheduled conference or speech is to start it late or allow it to run past the scheduled closing time.

The organization of the schedule for the conference week should originate in a committee composed of the superintendent of schools, or his duly appointed agent, and members of the business and professional staffs. Most of the members should be teachers. In our case the committee is appointed by the local teachers club with the advice and counsel of the superintendent's office.

Such a committee has to meet many times, conduct surveys, and analyze needs and conditions before it can formulate a program suitable for everyone.

LAST YEAR'S LINE-UP

Last year we scheduled a program of business and industry visitation for half a day during the conference. In May 1948 a list of 34 firms was prepared with the help of several agencies, such as the board of commerce, the Manufacturers Association, the Retail Merchants Association, and the labor unions.

This list was sent to each teacher with a request that he check three choices of places to visit in the order of his preference. Each school principal was asked to return these check sheets, together with the names of teachers who were absent when the choices were made. The latter were contacted at another time.

As new teachers were employed during the summer, they were automatically assigned a place to visit that was appropriate to their field of specialization.

Eighteen firms were named as their first choice by fewer than five teachers; these were eliminated since we thought that such small groups did not warrant the trouble the companies would have to take to entertain the teachers. Teachers whose first selections fell into this group were assigned to their second or third choice. The other 16 firms were assigned from 10 to 130 teachers each.

Admission cards, indicating plant assignments, were made out for the teachers in our office during the summer. Through correspondence, phone calls, and visits we learned the directions for getting to the various plants and the necessary information about parking facilities, the time for the visit, and the type of clothes visitors should wear.

Three weeks before the September meeting, our institute bulletin, the admission card, and directions were mailed to the teachers at their homes with a request that the cards be presented at the plants on visiting day. Not one card was lost.

BRIEFED BEFORE VISITS

On visiting day all teachers were briefed at 11 a.m. A faculty committee was selected to obtain transportation for those who needed it. At 1:30 p.m. everyone was on his way to visit the plant of his choice. Guides at the plants had been instructed to ask the teachers for their admission cards. A check of these cards with the lists previously sent to the plants showed that there were only 10 teachers absent, and all of them had perfect excuses.

This program was extremely pleasant and satisfying both to our business friends and to ourselves. Letters of praise have been sent to the school by managers of plants as well as by teachers. The program engendered a feeling of friendly cooperation between business and the school.

During conferences held before and after the tours, teachers asked every conceivable question concerning employment, production and plant man-



agement. In turn, management made many suggestions that will help the school in its future planning. Many firms served dinner, lunch or tea to their guests, and all gave souvenirs and literature about the plants to the teachers.

About two weeks after the plant visit a questionnaire was sent to each teacher for the purpose of evaluating the trips. The results were most favorable. We are making plans for this fall that will involve the same procedures, except that business and faculty alike have requested a dinner meeting at the end of the day so that all can get together to discuss the day's events.

ON THE RIGHT TRACK

We think we are on the right track because here is a feature of induction week from which everyone can profit. It is a venture in which everyone

from kindergarten teacher to 12th grade teacher participates on the same level. It serves to weld the group together in a common undertaking and makes the schools a part of the business and social life of the city.

We think that all teachers, after they have had actual contact with several occupational areas over a period of time, will be more susceptible to a sound guidance program and will be more aware of community relationships and needs. It was with this thought in mind that we placed visiting day on our agenda.

RESULTS CAN BE GOOD

The outcomes of induction week are as follows:

1. If the program is built around a central theme vital to all teachers and administrators, conclusions from discussions, conferences and scheduled talks during the week can readily be put to work by all teachers throughout the year.

2. The program serves to induct new teachers and to reacquaint all teachers with the entire school organization.

3. It can be a means of bringing business, industry, schools and labor together in a cooperative effort that is the finest sort of public relations.

4. Supplemented by proper follow-up conferences, the program gives each teacher an opportunity of self-expression under a good conference leader.

5. It serves as an ideal time to introduce new policies and explain any administrative policies of the system that need clarification in the minds of the teachers.

6. It serves as an excellent indoctrination period for all.

7. It serves to bring all teachers together under ideal conditions.

8. It provides a good time for teacher visitation to business and industrial concerns as the basis for coordinating community resources with the school's instructional program.

9. It offers an opportunity to expose stenographic and clerical employees to methods of meeting the public, using the telephone properly, and the like.

Preschool meetings pay big dividends in lifting morale, creating a feeling of belonging, and inspiring us for the year ahead. Arranging them looks like hard work, and perhaps it is, but once teachers have participated in preinduction week they will not want school to open without it.

WRITE FOR YOUR VOLUME INDEX

If you bind your volumes of *The NATION'S SCHOOLS* you will want the index to volume 43, covering issues from January through June 1949. You may obtain your free copy by writing to *The NATION'S SCHOOLS* at 919 North Michigan Avenue, Chicago 11, Illinois.

FEDERAL CONTROL increases

through Supreme Court decisions

J. C. MOFFITT

Superintendent of Schools
Provo, Utah

CAREFUL analysis of the growth of public education during our relatively brief history shows that considerable control is coming not from within the local school district, the state legislature, or any other policy making agency designed by statute for that purpose but from the courts.

Important judicial decisions frequently determine educational policy and serve as mandates to school administration and management. An increasing number of state court decisions is influencing the direction of education throughout the nation. As the number of court directives increases with the years, it is probable that fewer and fewer administrative decisions can be made on the "local" level.

Supreme Court decisions were specifically selected for discussion in this paper because of the increasing number of them that affect education and because this court theoretically is so far removed from the policy making boards of education of local school districts. Even many "run-of-the-mill" Supreme Court decisions dealing with widely divergent issues serve as directives to local boards of education because of their applicability to education.

During much of this century students of education have recognized the inadequacy of the great number of small school districts and have urged consolidation. Once the consolidated districts are established, an array of problems arises concerning district debts, contracts and ownerships, in spite of permissive or mandatory legislation for the union of two or more districts.

An important case came before the Supreme Court in 1905. It was concerned with impairing "the obligation of contracts" by changing the school boundary. Emphasizing the legislative right to *create or alter or eliminate school districts*, the court declared, "If the legislature of the state has the

power to create and alter school districts and divide and apportion the property of such districts, no contract can arise, no property of a district can be said to be taken, and the action of the legislature is compatible with a republican form of government."¹

The differentiation of a school district from a city, although the two corporations may be coterminous and in instances fiscally controlled by the same governing body, has presented issues that have gone before the courts from time to time.

The decision in a case appealed to the Supreme Court more than half a century ago clearly made a distinction between the corporation of a city school district and the incorporated city as a municipality. In this instance the board of education of Atchison, Kan., issued bonds while the city was a "second-class" city. Before the bonds matured the city had grown to a "first-class" city.

It was insisted by the defendant "that the board of education had no power to bind the city by such a promise to pay" after the change from a second-class to a first-class city. The Supreme Court asserted "the board of education of the city of Atchison is a distinct corporation, and the proper one to be sued for the enforcement of a debt like this" inasmuch as it does not lose its identity when the municipality changes.²

BOND ISSUES ABOVE LIMIT

Throughout much of our educational history school boards have been issuing bonds for purposes of erecting school buildings or otherwise adding to the capital outlay of the district. A number of legal technicalities are associated with this procedure. One of these is the legal limitation of the amount of the bond issue.

A case from Iowa involving this

problem came to the Supreme Court. The amount of the bond issue exceeded the constitutional limitation. The court decreed that while "the bonds were certified by the proper officers of the district to have been executed and issued in pursuance of and in accordance with the statute authorizing such bonds (a copy of which was printed upon the bonds), and in accordance with the laws and constitution of the state of Iowa," that "in fact" they were not so issued and hence were void.³

In no uncertain terms the Supreme Court has chastened those who give management to the schools in instances where the acquired indebtedness exceeded the legal limit of the school district. This may be noted in the case of the District Township of Doon (acting as a school district) in Lyon County, State of Iowa, *v. Theron Cummins*. The highest court reversed the decision of a circuit court and held the school district officials acted "through fraud and incompetency." It declared that "from the date of its organization its (the school district's) affairs have been badly managed."⁴

While most of the courts have held that bonds may not be issued without specific constitutional or legislative authorization, thereby making boards of education dependent upon such authorization, the Supreme Court has at times, because of some technicality, reversed the decisions of lower courts and thwarted the apparent intent of the legislature.

One early case, decided May 2, 1881, illustrating this point was that of School District No. 56, of Richardson County, Nebraska, *v. St. Joseph Fire and Marine Insurance Company*. In this instance the state legislature enacted a statute authorizing this particular district to issue bonds for the purpose of erecting a school building.

1. 199 U. S. 233.

2. 148 U. S. 591.

3. 142 U. S. 366.

4. 103 U. S. 707.

The case went to a circuit court and thence to the Supreme Court. The latter held that the act was unconstitutional and the bonds were void and without legal status.⁵

Many cases concerned with contractual relationships between the administrative agency of a school district and its employed personnel have come before the courts.

One Supreme Court decision that attracted wide attention concerned an Indiana law. In 1927 the Indiana legislature passed an act providing indefinite tenure for teachers of the state who had taught school for five or more successive years and who entered a contract for additional service. In 1933 another act of the state legislature amended the law, making void or partially void for "township teachers" the tenure law of the earlier date. The Supreme Court, reversing a lower court decision, decreed the latter act was unconstitutional, impairing the contractual obligation of the contracting parties.

The 1927 act specified that a teacher may be dismissed for "incompetency, insubordination, neglect of duty, immorality . . . or other good or just cause." In this instance a teacher affected by both laws was dismissed from teaching services but for reasons exclusive of those enumerated in the law of 1927.

The court declared, "The contract shall not be canceled for political or personal reasons," thereby excluding the need for the exercise of police power, because "the exercise of the (police) power must be for an end which is in fact public and the means adopted must be reasonably adapted to that end."⁶

RIGHT TO LOWER SALARIES

An important case dealing with the right of boards of education to lower teacher salaries went to the Supreme Court in 1937. Like many boards during the earlier depression years of the 1930-40 decade, a school administrative body in New Jersey found itself unable to obtain adequate revenue to pay salary schedules established in the closing years of the preceding decade. A state legislative act of 1933 gave boards of education the right to fix salaries, placing minimums and maximums for a year of time "notwithstanding any such person be under tenure."

The plan of salary reduction adopted by this particular board of education placed teachers in groups on a salary contract basis—those with lower salaries receiving smaller reductions. Certain apparent inconsistencies arose, inasmuch as some teachers in higher salary income groups but with larger reductions actually received less money on the adjusted contracts than those lower on the salary scale.

The Supreme Court sustained the action of the board of education and the lower courts because "all in a given class were treated alike."⁷

Likewise, issues concerned with school and pupil relationships have gone to the courts and some to the United States Supreme Court. For example, a city ordinance of San Antonio, Tex., prohibited a child from attending a public or private school without possessing a "certificate of vaccination. Suit was entered against the officials praying for reinstatement of a child. The Supreme Court reasoned the city ordinance was law and was in no way unconstitutional nor did it deprive the child "of her liberty without due process of law."⁸

CAN'T EXCLUDE PRIVATE SCHOOLS

Perhaps no case dealing with enforced school attendance has attracted greater interest during the last quarter of a century than the one concerning the legislative act of Oregon *requiring all children to attend public schools*.

The Supreme Court said, "The fundamental theory of liberty upon which all governments of this Union rest excludes any general power of the state to standardize its children by forcing them to accept instruction from public schools only. The child is not the mere creature of the state; those who nurture him and direct his destiny have the right, coupled with the high duty, to recognize and prepare him for additional obligations. . . .

"We think it entirely plain that the (Oregon) act unreasonably interferes with the liberty of parents and guardians to direct the upbringing and education of children under their control."⁹

From time to time issues that have greatly influenced the subject-matter content of the learner have been before the courts. After World War I a number of the state legislatures passed laws prohibiting the teaching

of the German language, or other factual information through the medium of German, to young school children. In several instances state courts sustained such legislative enactment as being constitutional.

A Nebraska case appeal dealing with this problem went to the Supreme Court, which reversed the state court decision. It said, "Imparting knowledge in a foreign language is not inherently immoral or inimical to the public welfare, and not a legitimate subject for prohibitory legislation. . . .

RIGHT TO RELIGIOUS WORSHIP

"When the legislature by clear implication finds that the practice or pursuit against which the act is leveled does not of itself injuriously affect the public, a measure designed to prohibit it is unconstitutional. . . . This measure, insofar as it imposes upon teachers . . . penalties of fine and imprisonment for the giving of instruction in languages, is violative of their constitutional right to engage in the practice of their chosen profession or calling."¹⁰

Some of the problems of student participation in school activities have centered upon the issue of the right of choice of religious worship. A dozen years ago the case of *Hamilton et al. v. Regents of the University of California et al.* attracted considerable attention. The university required that matriculated male students under 24 years of age enroll and complete "a course in military science and tactics."

The court was emphatic in its statement that "California has not drafted or called them (the objecting students) to attend the university." Continuing, it said, "They are seeking education offered by the state and at the same time insisting that they be excluded from the prescribed course solely upon grounds of their religious beliefs and conscientious objections to war, preparation for war and military education."

The court declared that any claim that this requirement was a violation of "the due process clause . . . must at once be put aside as untenable."¹¹

In certain instances when the Supreme Court has concerned itself with school procedures it has reversed a former decision. On at least two occasions members of a religious de-

5. 103 U. S. 707.

6. 303 U. S. 95.

7. 399 U. S. 319.

8. 260 U. S. 174-175.

9. 268 U. S. 534-535.

10. 262 U. S. 390.

11. 293 U. S. 245.

nomination have been taken to this court for failing to salute and pledge allegiance to the flag.

One decision was given June 3, 1940. The court action was initiated because "Lillian Gobitis, aged 12, and her brother William, aged 10, were expelled from the public schools of Minersville, Pa., for refusing to salute the national flag as part of a daily school exercise." The court, sustaining the school's procedure, asserted, "Conscientious scruples have not, in the course of the long struggle for religious toleration, relieved the individual from obedience to a general law not aimed at the promotion of restriction of religious beliefs."¹²

On June 14, 1943, another Supreme Court decision maintained that to require this flag ceremony was unlawfully subjecting children and parents to punishment and taking from them their right of religious choice.¹³

SEGREGATION RULINGS

Those states requiring or permitting race segregation for educational purposes have had a number of cases that have gone to the highest court. One noteworthy case was that of *Missouri ex rel. Gaines v. Canada*, Registrar of the University of Missouri, et al. A Negro student in a state where schools for the white and colored races are maintained separately sought a court order for the state to provide law training on the university level for Negroes.

The court said, "We are of the opinion . . . that the petitioner (student concerned) was entitled to be admitted to the law school of the state university in the absence of other and proper provision for his legal training within the state." It maintained that failure to provide "substantially equal advantages to Negro resident" is "unconstitutional discrimination" and "repugnant to the Fourteenth Amendment."¹⁴

A case of nationwide interest was that of *Sipuel v. Board of Regents* of the University of Oklahoma. Ada Lois Sipuel Fisher, a Negro, was refused admittance to the university law school. After a series of hearings, the case appeared before the Supreme Court, which decreed, "The petitioner is entitled to secure legal education afforded by a state institution. To this time, it has been denied her al-

though during the same period many white applicants have been afforded legal education by the state. The state must provide it for her in conformity with the equal protection clause of the Fourteenth Amendment and provide it as soon as it does for applicants of any other group."¹⁵

The issues of race segregation have not been limited to "white *vs.* Negro." In the case of *Gong Lum et al. v. Rice et al.*, the Supreme Court not only affirmed the right of a state to establish race segregation for purposes of education but classified all non-white children as one group by preventing this Oriental child from attending any but a school for colored children.¹⁶

PAROCHIAL SCHOOL RELATIONSHIPS

During recent years several state court cases have dealt with rights of parochial schools and their relationships with the public schools.

A school board in New Jersey transported school children to Catholic parochial schools and reimbursed parents for their children's fares paid on regular public transportation carriers. It was charged that the school board was violating the First and Fourth amendments—separation of church and state—and allocating taxpayers' money for private purposes in violation of the "due process of law" clause.

The court in a 5 to 4 decision sustained the action of the school board, declaring that in this case "The state contributes no money to the schools." Moreover, it was emphatic in sustaining the intent of the First Amendment by saying, "The First Amendment has erected a wall between church and state. That wall must be kept high and impregnable. . . . New Jersey has not breached it here."¹⁷

It is difficult in analyzing some Supreme Court cases to make an absolute line of demarcation between religious education and public education, or between benefits to a child in a parochial school operated for religious purposes and a child in a public school operated for nonreligious purposes. A case that went before the Supreme Court in 1930 concerned the use of public funds to purchase textbooks for children in Louisiana.

The court reasoned that the books were used for the benefit of the child

and the state and not for the benefit of the church. Said Chief Justice Hughes, who delivered the court opinion, "It was for their (the children's) benefit and the resulting benefit to the state that the appropriations were made. . . . The schools, however, are not the beneficiaries of these appropriations. . . . The school children and the state alone are the beneficiaries."¹⁸

Perhaps no case in educational history has created more interest than that commonly known as the *McCollum* case. Its significance, extensively discussed in earlier issues of *The NATION'S SCHOOLS*, is in the fact that it strikes at a common practice of cooperation between local school administration and religious educators.

The case arose in a lower court when a parent of a child enrolled in the public schools challenged released school time for religious instruction. The reported case in the Supreme Court records is too lengthy to quote, although it has many significant implications.

The point to emphasize is that the Supreme Court has made a decision on school procedure that, if rigidly adhered to, will greatly alter a common practice in many parts of the nation. Said the Justice, "The state . . . affords sectarian groups an invaluable aid in that it helps to provide pupils for their religious classes through use of the state's compulsory public school machinery."¹⁹

IS LOCAL CONTROL THREATENED?

Education in the United States has been regarded as the function of the state. The several legislatures in compliance with constitutional mandates have chosen to establish a legal framework providing for local school district control. During the century of greatest educational growth, the intent everywhere has been to make and keep schools community schools—close to the people. However, increasing numbers of education cases are going before federal courts.

Will this trend increase? If so, another century may see education extensively influenced through United States Supreme Court directives and, of necessity, a larger concentration of centralized indirect administration. Should this happen it will be a violation of the "local control" policy that has guided American education thus far.

12. 310 U. S. 586.

13. 319 U. S. 624.

14. 305 U. S. 337.

15. 332 U. S. 631.

16. 275 U. S. 78.

17. 330 U. S. 504.

18. 281 U. S. 370.

19. 333 U. S. 203.

Neighborhood councils help high schools serve as

COMMUNITY CENTERS in Atlanta

COMMUNITY high schools have become centers of community living in Atlanta, Ga., since the city's school system was reorganized in the fall of 1946.

Several circumstances combined to make it desirable for Atlanta to change from a K-6-3-3 to a K-7-5-V program. Under the former system, all white Atlanta high school students attended four big schools, two for boys, one for girls, and one coeducational commercial high school. Transportation became an increasingly difficult problem; some students spent more than an hour riding buses to the schools. Then, too, school authorities had concluded that coeducational schools would be more desirable.

Atlanta had several junior high schools located strategically for serving the various areas in the city. Converting them to *five-year high schools* solved the transportation problem and provided adequate housing for the high school population.

School officials were eager to have these new high schools serve better the communities in which they were located. An auditorium, a gymnasium, a good cafeteria, and a modern library were added to those buildings that did not already have these facilities.

PRINCIPALS TAKE THE LEAD

School principals and parent-teacher association officials took the initiative in organizing the communities with the high schools as the centers. Leaders in business and civic life in each community were asked to participate in planning and appraising the new community program. Their response was immediate and enthusiastic.

Because of the renewed interest in neighborhood affairs, several community councils were formed. In other communities parent-teacher organizations were greatly strengthened to serve as centers for community action.

To make the community councils representative of community life, heads of civic clubs and of women's

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groups, representatives from the businessmen's associations, and pastors of the churches were invited to become members. Such organizations as the Red Cross, the Y.M.C.A., the Y.W.C.A., the Girl Scouts, and others operating on a community basis were asked to send representatives.

Each community council has from 30 to 60 members working and planning together in behalf of the entire community.

SOME OF THE GAINS

One of the first tangible results of this community planning was a revival of interest in the musical organizations in the community high schools and, in many instances, in the elementary schools. School bands were equipped and uniforms purchased for the members. The musical groups have contributed much to the civic and cultural life of the communities.

The community councils worked with the city recreation department for better recreational facilities for youths and adults. The schools furnished the buildings and playgrounds, and the city recreation department provided the personnel. The Y.M.C.A. and the Y.W.C.A. have worked with the schools to provide recreational programs for teen-age youngsters.

The community councils also have been instrumental in getting the board of education to purchase additional land to be used for playground and military purposes.

More students are taking part in extracurricular activities now than ever before. Four times as many boys are participating in the new athletic program as participated under the old system. The same is true of the musical organizations, the Hi-Y and Tri-Y groups, and other activities.

Other typical examples of community improvement brought about by

the efforts of the community councils follow:

A dental clinic was established in the Bass Community High School to take care of both elementary and high school students who are unable to pay for dental work. The Hoke Smith Community Council is planning to open a dental clinic at Smith High next September.

Traffic conditions were improved in congested areas.

Forums for the discussion of public problems were sponsored.

A branch of the Carnegie library was obtained for one community.

Another community was able to transform Halloween from a hazard to a happy and useful occasion by organizing a festival in which all agencies of the community have a part.

Community centers, sponsored by community councils, are developing into real civic centers. These centers, located in both elementary and high school buildings, are serving many useful purposes.

Probably the most significant value of the community councils is that they have furnished a means through which school officials could interpret the new school program to the public.

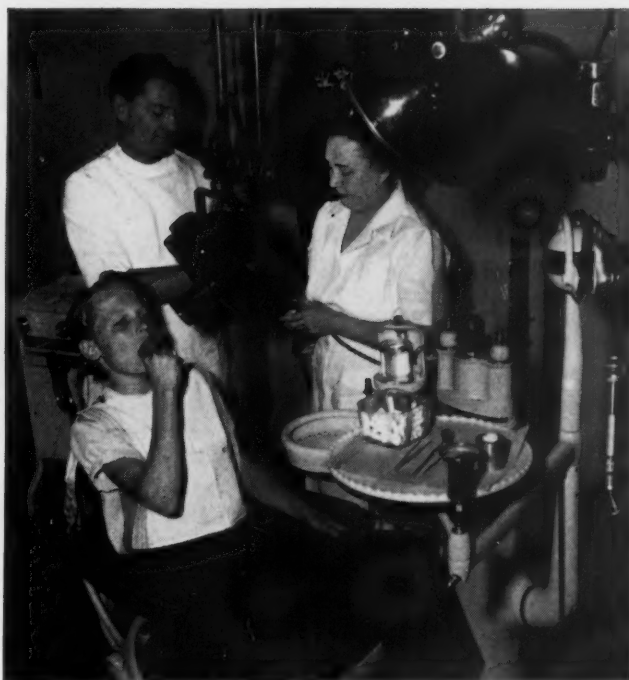
The community high schools in Atlanta are really meeting the needs of the boys and girls and are pointing the way to better community development. Our school buildings and facilities are being used more than ever before. Community leaders are supporting the schools because they have a part in planning the school program.

CAN OTHER CITIES DO IT?

This question often has been asked: "Can other cities succeed in duplicating what the community high schools of Atlanta have done?" The answer is "Yes," if school officials, superintendents, principals, parent-teacher association leaders and others will furnish the leadership for promoting community planning. It is up to the school principal to "blaze the trail."



The Atlanta parks department cooperates with the city schools in providing recreational programs.



Bass Community Council provides free dental service at school for children of indigent parents.



Business and civic leaders join with school officials in making up the Brown Community Council, which plans for better community facilities.

Chalk Dust

AUGUST AUBADE

*Behold the superintendent,
That lazy buckaroo;
With August sun ascendant
He finds no work to do*

but patching the roofs and bracing the walls and banging his head when the plastering falls and writing to entrance committees galore, spurred on by mad parents he dare not ignore, and ordering schoolbooks at prices so high that his budget seems ready to curl up and die and checking supplies which have failed to arrive and meeting new mammas from nine until five and quelling the playground's unseemly hubbubs while evicting the goats that are eating the shrubs and scraping the boilers and sanding the floors as a part of his extracurricular chores and, minus his salary, with notes overdue, placating the merchants who threaten to sue, and rushing to dress for the midsummer dance while deftly concealing the patch on his pants and

*So, without fuss, the lazy cuss
Loafs through each August day.
Time slowly staggers on as thus
He whiles the hours away.*

« »

ALICE IN WONDERLAND

X—Alice Goes to Summer School

THE BUILDING that Alice so timidly entered was a combination Greco-Roman, Quonset-Renaissance, prefabricated Gothic style, plentifully surrounded by ancient jalopies and other signs of a decaying civilization. The interior was divided into what appeared to be classrooms without windows or ventilation. Over the door of each room hung an imposing admonition, "Pay Fees Here!"

Alice looked about in bewilderment. Thousands of pale, dispirited schoolteachers were fighting madly to reach a desk which bore the legend, "Summer School Director. Pay Fees Here, Too!" Each teacher was wildly filling out innumerable application blanks with one hand whilst she dipped in her shrinking purse with the other. Presiding languidly over the desk was the Caterpillar, with a hookah in his mouth.

"What do you want?" said the Caterpillar rudely, as Alice finally shoved her way through the milling throng.

"I want to come to summer school," replied Alice.

"Why?" asked the Caterpillar curiously.

There seemed to be no logical answer to the question, but Alice plunged in boldly.

"My superintendent said I was spending too much time teaching children, and I'd have to get some more credits or else," said she.

"Good fellow," said the Caterpillar more genially. "This is certainly the place to come. This summer we are offering two courses for education and more than one hundred others for credits. You will have a wide choice."

"I would like to take Course BC1234PG," said Alice. "That's the course given by Professor Chichy, and everybody says he is wonderful."

At the mention of Professor Chichy, everyone in the crowd (except for a few disreputable looking undergraduates) rose and bowed his head.

"You are assigned to Subsection E," said the Caterpillar, "where an assistant student instructor will teach the course."

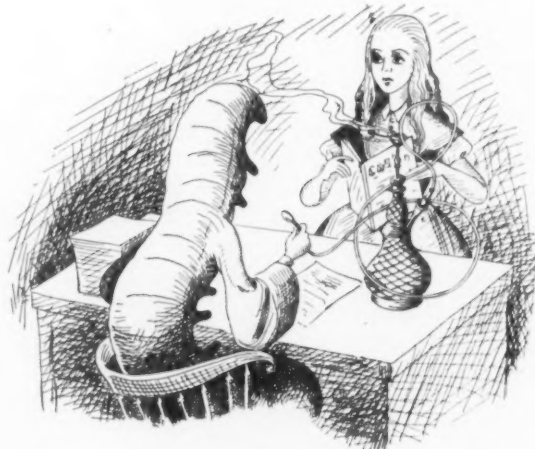
"But," protested Alice, "I came here particularly to hear Professor Chichy."

"You're lucky as it is," said the Caterpillar, pocketing his fee. "Most new assignees never get beyond Subsection M."

"I want six more hours, besides," said Alice grabbily.

"For extra hours," recited the Caterpillar glibly as he grabbed the added stipend, "you must register at the other end of the campus—next victim, please."

Gathering up her entrance blanks, Alice trudged wearily onward, past the "libe" where packs of hungry students were fighting over the sole copy of each of the required reading books, past the great amphitheater where the gladiators fight for huge purses and dear old



Alma Mater. As she approached her destination, she discovered to her horror that it was the back entrance of the building she had left.

"It's an education in itself," quoth Alice as she got in line. "The same old run-around, the same old Caterpillar, the same old hookah."

But, dear reader, we must forgive Alice for her ill-tempered remark, because she probably enjoyed herself a lot and maybe she got some "A's" for all we know.

Audio-Visual Aids

A successful classroom film program

ON A RENTAL BASIS

THE showing of films in a school should coincide with and be an integral part of the regular classroom instruction. If this is to be accomplished, teachers must plan their regular class work and the showing of instructional films in connection with it at least a year in advance.

At Seward, Ill., we have worked out a satisfactory classroom film program on a rental basis. The plan works well in our school, and we think that it could be used equally well in any other school.

At a faculty meeting, usually early in April, our teachers are given a calendar for the next school year. It shows opening and closing dates, school holidays, and all major school activities. Teachers also are given an order form, all available film catalogs, and a statement of the visual education budget for the coming year.

Films may be obtained from a great variety of sources. Some will have to be rented at list prices quoted in catalogs. Others can be obtained in groups on a quantity basis. Rental plans are explained in the catalogs. The number of films ordered depends, of course, on the number required by the faculty—and on the film budget.

MANY FILMS ARE FREE

A large number of films may be obtained free from state departments of health, from various other departments of government, and from a large number of private industries. Some of the industrial films are among the best and are highly educational, but others contain too much advertising to be good. All films must be previewed and critically evaluated before they are shown to youngsters.

Where the program is already established, there also will be a record of the films used during the last year. In making out the order, each teacher will have a school calendar, lesson

C. J. DINTELMAN

Superintendent, Community Unit District
No. 321
Seward, Ill.

plans for the year, a supply of film catalogs, an estimate of the film budget, order forms, and a file containing information on films previously shown.

for showing on one day must be limited. All these things can best be ironed out cooperatively in one or two meetings of the school faculty.

TYPE OF INFORMATION NEEDED BEFORE ORDER IS PLACED

SHOWING DATE	NO. OF REELS	SOUND OR SILENT	SOURCE	TITLE OF FILM	SUBJECT OR CLASS	RENTAL COST	DATE TO RETURN
Feb. 10	1	So.	U. of Ill.	Electrostatics	Science	\$1.50	Feb. 11
Feb. 10	1	So.	Ideal	Take a Letter, Please	Stenography	2.00	Feb. 11
Feb. 11	1	So.	U. of Iowa	Lincoln in the White House	American History	1.50	Feb. 13

Where the program is already in operation, each teacher should base his new order on the list of films used during the current year. Some old films probably will be eliminated, and some new ones will be added on the new order. Films should be listed in order of preference after the first 15 or 20, depending upon the size of the school's film budget.

After all the orders are in, they are assembled in chronological order by sources. If the total order exceeds the budget appropriation, some films will have to be eliminated. A good plan is to have several faculty meetings at which the entire film order can be coordinated. If the order is too big, some teachers who have large orders may not object to having several of their films eliminated.

If several teachers have ordered the same film for different dates, it may be possible to arrange for them to use the film on a compromise date. In a small school which has only one projector, the number of films scheduled

After this work has been completed, the orders are sent to the various sources with a request for confirmation of dates. As soon as all confirmations have been received, the entire film list for the year is made up in the chronological order of showing dates. This list is then put on a form similar to the order form, except that a line is added to show the date the film is actually returned.

The list then is considered complete for the ensuing school year, except possibly for a few new titles which teachers may wish to order as they become available during the year.

TRAINING TEACHERS IN FILM USE

When the film order has been completed, the next thing is to see that the films are used properly when they come. Teachers need training in the effective use of the classroom film. A good way to start the year's program in visual education is to devote one of the first faculty meetings to the subject. The Encyclopedia Britannica film

"Using the Classroom Film" is excellent instruction for teachers and should be shown at this meeting. The use of a faculty bulletin on this subject also is recommended.

The intended use of a film will determine how it is to be presented. A film may be used in a number of ways, and the teacher will need to know how he intends to use it when he makes out his order. Some of the principal uses are for motivation in presenting a unit of work, as a direct teaching device, as a preview or introduction to a subject, and as a review.

The following are further principles which need no explanation but should be adhered to as closely as possible:

1. The teacher always previews the film himself before showing it to a class.

2. The class is always prepared in some way for the film it is to see. (A good plan is to give the students an outline of things to look for or a list of questions based on the film.)

3. The showing is followed by a class discussion and a check or test of some kind, after which the film may be reshowed if that seems advisable.

AFTER THE FILM IS OVER

Teachers need to be reminded of the foregoing principles occasionally. It is not uncommon for a teacher to say to his students, "We now shall see a film on such and such a subject," show the film, and then do nothing more about it. Such failure to take advantage of the interest and enthusiasm raised by a good classroom film is certainly the wasting of a golden educational opportunity.

A daily or week-to-week schedule for the use of the projection room also is necessary in schools that are not

TEACHERS' SCHEDULE FOR USE OF PROJECTION ROOM

For Week of Jan. 3-7, 1949
For Use of Darkroom Sign Below and Check Day and Period
Always Sign in Advance to Avoid Conflicts

Name of Teacher	Day					Period									Room
	M	T	W	T	F	1	2	3	4	5	6	7	8	9	
James Smith.....		x						x	x						4
Mary Jones.....			x				x				x				2
John Brown.....	x					x			x			x	x		4

equipped for showing films in each classroom. In schools that have the means, several classrooms should be equipped with a projector and dark shades. In schools where only one projector is available, it usually is easier to move the class to a centrally located projection room than it is to move the equipment each time it is used. Teachers can sign a schedule for the use of the room usually a week in advance.

WHEN CLASSES CONFLICT

When there are unavoidable conflicts, and there will be a few, teachers can usually agree ahead of time on a compromise solution. Quite frequently when two teachers have to schedule the use of the projection room for the same period it will be found that one or all of the films to be shown are no more than 10 to 15 minutes in length, and both classes can be accommodated during the same period.

After the film has been used, the teacher should make a brief notation on a form provided for that purpose in regard to the educational value of the film. This record becomes of great value when films are reordered for the next year.

One copy of this report should be kept by the teacher and another copy filed in the office or with the director of visual education.

Our program has been working with a good degree of success for a number of years. I have dealt here only with the use of the classroom film on a rental basis, but strip films and slides and other materials also are important parts of the visual education program.

Either the principal or some member of the faculty with special training in the visual education field should be designated as the director of visual education and should be responsible for the entire program. This person should have charge of the distribution of films as they come in and should see that they are returned on time. He also should have charge of the equipment.

PART OF REGULAR CLASS WORK

While the selection of films to be shown should be largely the responsibility of each teacher, it cannot be assumed that this will result in a good selection in every case. The director of visual education should therefore be ready to assist teachers in making a good selection of films.

The important fact to be kept in mind is that the classroom film must be used as a teaching device and must be an integral part of the regular class work. Class time should not be wasted by the showing of films that are not directly related to the work at hand.

The teacher's record following the showing of a film becomes of great value when the next year's order must be made up.

TEACHER'S FILM REPORT			
Title of Film _____			
Source _____			
Date Shown _____		Class _____	
Teacher's Opinion of Film as an Instructional Aid			
Check:	Excellent	Fair	
	Good	Poor	
Remarks:			
Recommend re-ordering for next year			
		Yes	No
		Teacher	

1st Award



*"EKOTAPE" wins
highest honors from jury of
the most critical recorder users*

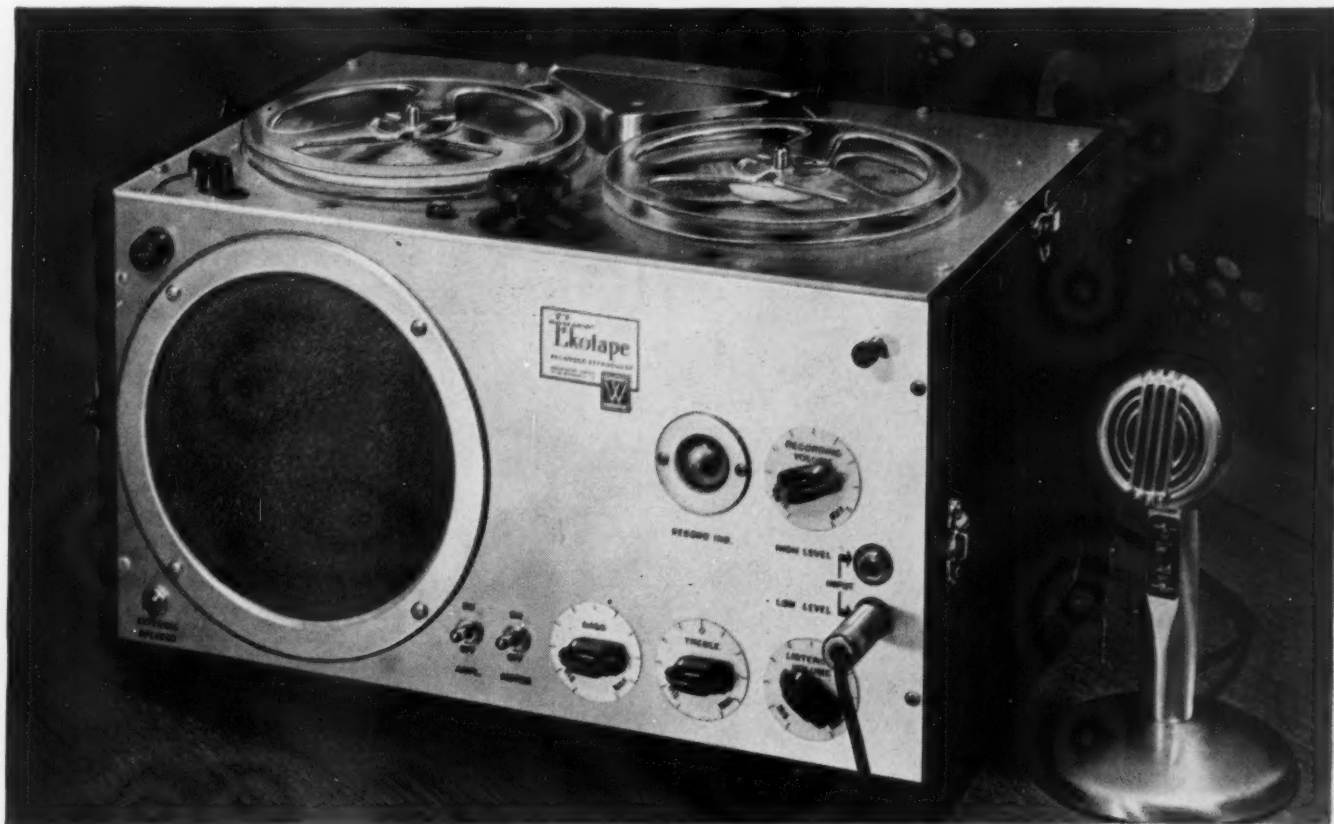
"First place for 'Ekotape'!" was the enthusiastic verdict of an independent jury of musicians—the severest critics of any recorder—after extensive "blindfold" tests of leading makes.

The "Ekotape" that won the first award from these judges also offers greater value for all other school uses. Clear, powerful tone is as important for speech as for music. So are simple operation, dependability, and the many features that offer wide versatility . . . features such as fast forward and rewind speeds, electronic recording volume indicator, separate bass and treble tone controls to overcome deficiencies in room acoustics.

"Ekotape" is first choice of educators for recording broadcasts and conferences; public address in classes and assemblies; speech correction; teaching public speaking, languages, music and music appreciation. Its outstanding quality makes it a wise investment.

See and hear "Ekotape"—compare it. You will be impressed by its superlative tone quality, power, convenience, and features. Get a demonstration from your dealer or mail the coupon below.

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"Where Quality is a Responsibility and Fair
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WEBSTER ELECTRIC CO., RACINE, WIS.
Please send me a reprint of the jury's
report, "We Tested the Tape Recorders"
and name of nearest dealer who will
arrange a demonstration in my school
without obligation.

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ORGANIZATION.....
ADDRESS.....
CITY.....STATE.....

DETROIT

The School Cafeteria



View of central hot lunch kitchen in Shelbyville, Ill. Here daily lunches are prepared for the four one-room schools; also 400 town pupils in the elementary and high school grades are served each day.

TRANSPORTING HOT LUNCHES TO FOUR ONE-ROOM SCHOOLS

ARTHUR C. MUNS

Superintendent, Community Unit Schools
Shelbyville, Ill.



A SYSTEM of transporting hot lunches to the children in one-room schools has been developed in the new Community Unit School District at Shelbyville, Ill.

The local board of education was faced with a choice of equipping kitchens at each of its four one-room schools, which would result in a certain monthly operating loss; of denying to the children of these rural schools the opportunities given to their city cousins, or of developing a plan for transporting food.

With the money that might have been spent on kitchens in the one-room schools, new equipment of the restaurant type and labor saving devices were purchased for the central school kitchen. For this reason, the central kitchen has not had to hire more employees to prepare lunches for the 110 pupils in those four schools. One of the regular bus drivers takes food to the rural schools.

Special boxes have been prepared for china and silverware. Milk in half pints and cold foods in separate containers are sent in a large stock pot. Hot foods are placed in aluminum inserts within large insulated containers.

Since hot foods are packed in thoroughly insulated containers they still are hot when the containers are opened at noon, even though the foods leave the kitchen at 10:30 a.m.

Principal G. W. Bedell of Shelbyville High School, supervisor of the town lunch program, confers with the head cook. The kitchen is well equipped with labor saving devices of the restaurant type.

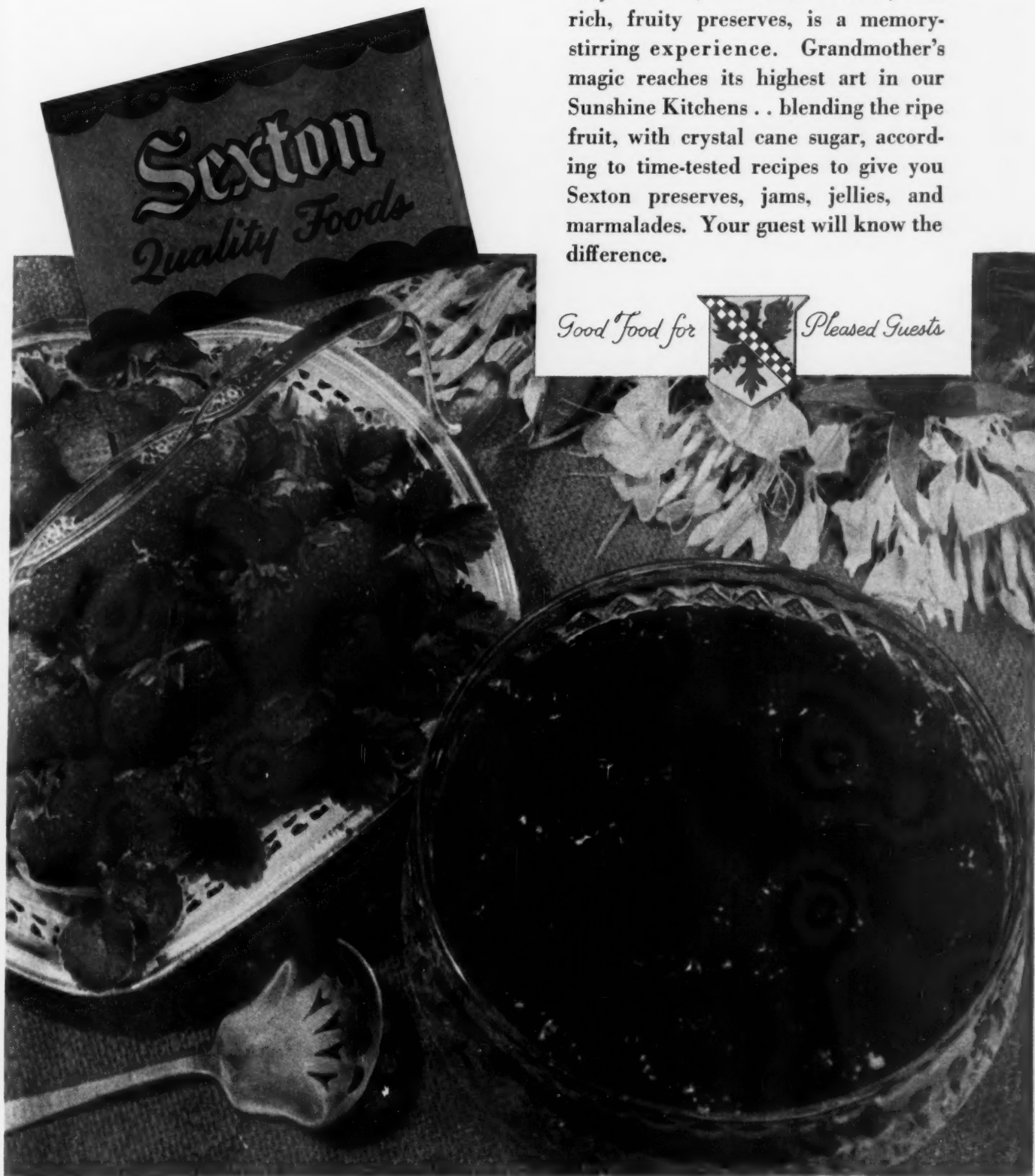
Contentment

To watch the sun-ripened berries as they simmer, in small batches, into rich, fruity preserves, is a memory-stirring experience. Grandmother's magic reaches its highest art in our Sunshine Kitchens . . . blending the ripe fruit, with crystal cane sugar, according to time-tested recipes to give you Sexton preserves, jams, jellies, and marmalades. Your guest will know the difference.

Good Food for



Pleased Guests



Kitchen Layout by John J. McDonald,
Reg. Prof. Engr., Boston

Sancta Maria Hospital, Cambridge, Massachusetts.
Sister Mary Honorata, R.N., B.S., Administrator

STREAMLINED *GAS* KITCHEN PROMOTES VOLUME COOKING EFFICIENCY



Stainless Steel Baking Equipment including Gas Oven.



Stainless Steel Cooking Unit consisting of Gas Ranges, Griddle, Fryers, and Broilizer

KITCHEN PLANNING paid off in efficient food service and operating economy when Sancta Maria Hospital adopted modern Gas-fired Cooking and Baking Equipment for its stainless steel food preparation system. The streamlined arrangement and flexible fuel are best described by Sister Mary Scholastica, Dietitian, "GAS involves the minimum amount of effort on the part of our personnel to maintain the high standards of cleanliness, economy, and dependability required in everyday operation with our stainless steel kitchen."

To demonstrate the flexibility of modern Gas Equipment, it's only

necessary to look over the list of units—

Two Vulcan Ranges • One Vulcan Frytop
Two Vulcan Fryers • One Blodgett Oven
One McDonald Broilizer

Although serving about 9000 meals per month for its present patients and staff the streamlined kitchen is sufficiently flexible to care for greater food service requirements. With modern Gas Equipment, the automatic

controllability and speed of GAS are perfectly suited to heavy food service demands.

For every volume cooking requirement you need GAS—its economy, speed, flexibility, automatic controllability. Be sure to ask your Gas Company Representative for the latest information on modern Gas Equipment.



Sancta Maria Hospital's streamlined kitchen

MORE AND MORE...

THE TREND IS TO *GAS*

FOR ALL
COMMERCIAL COOKING

AMERICAN GAS ASSOCIATION 420 LEXINGTON AVENUE, NEW YORK 17, N.Y.

At 10:30 a.m. the food containers are loaded into a small 16 passenger bus. The driver takes the lunches to each school. At the last school, where he arrives at 12:05, the driver eats with the pupils and teacher. Then he reverses his route, picking up soiled dishes and containers and returning them to the central school to be washed.

SERIOUSLY NEEDED SERVICE

Lunches are served at the various schools according to the plans of the teachers. In all schools the sixth graders assist with the serving and clean-up work. In one school all serving is done by pupils, with each pupil, even first graders, having his own job to do.

This program has been in operation since January, and we know that it works. Reports of the local one-room school teachers are most gratifying. These reports indicate that the extension of this program to rural



A regular bus driver takes loaded lunch truck to the four one-room schools.

pupils is seriously needed and that the plan is producing the same fine results here that it has produced in city

schools throughout the nation. Other enlarged school districts may find the plan well worth trying.

SCHOOL CANTEENS IN FRANCE

IN AN article published in the *Carnet de l'Econome*, Monsieur Paumier gives a description of modern school canteens in France. It is hopeful to learn that this problem is at last studied with keen interest. Monsieur Paumier ranks at the top of this movement. He says that in the past, because of school officials' ignorance of nutrition and limited funds, "filling" meals composed of beans, lentils, sausages and jams were served, with no variety offered.

But a change has come—since beans and lentils now are expensive they have become deluxe dishes and have given way in the canteens to fresh vegetables. At the same time, an imperious necessity to repair the damage caused to children's development by malnutrition turned the attention of parents and educators toward the importance of proper food. A switch was made from quantity to quality for the benefit of the children.

Monsieur Paumier has devoted his time to the creation of a model canteen. Called La Roseraie (rose garden), it is situated at Montgeron, near

THERESE DUPONT

Consulting Dietitian
National Institute of Hygiene
Paris, France

Paris. He tries to give "a balanced diet in an educational environment and pleasant surroundings." So the canteen is in a private home, in the middle of a garden of flowers, shrubs and lawns. Each of the four dining rooms contains six round, oval or rectangular tables covered with gay linoleum. Forks, knives, spoons, soup plates, lunch plates, dessert plates and glasses are used every day. On the menu there are:

Soup: fresh vegetables with spaghetti or bread.

Cereals: oatmeal, cremosine.

Animal Protein: meat, fish, cheese or egg.

Vegetable Protein: bread and legumes.

Green Vegetable.

For an average child of 10 years of age, the daily menu provides about 1000 to 1200 calories. Milk is offered

every day. There is no free lunch, but four different prices correspond to the means of the child's family: 52 francs, 42 francs, 35 francs, and 15 francs.

Of all the children who ate at the canteen, 85 per cent paid 52 francs. Only 2 per cent paid 15 francs. Of the children at the school only 48 per cent take their meals at the canteen.

Other model canteens have been developed at Nevers, Reims, Rouen, Caen and other towns. In the department of Sarthe, 169 school canteens, which feed about 10,000 children, have been organized. They are similar to the one at Montgeron.

As a rule, the place, the coal, and the cook are furnished by the town; a subsidy comes from the department (about equivalent to a county). The state gives virtually nothing.

Progress is the result of private initiative, which is not lacking in France. Monsieur Paumier feels confident that little by little the state and its subdivisions will become more interested and provide more help than they do now.

Maintenance and Operation

\$-T-R-E-T-C-H-I-N-G THE \$CHOOL DOLLAR

THE problem of the school administrator or the purchasing agent as he seeks to stretch the dollar becomes more complicated each week as new salesmen call upon him with the "latest and best products" in the field. The following suggestions are made to help him sift the chaff from the wheat.

A high school chemistry teacher is a valuable aid in determining, for example, the percentage of water in a water wax. A simple evaporation test will give the answer. Waxes containing more water cost more in the long run, as additional freight is paid on them. Also, if samples of floor seal are placed on wooden test blocks and subjected to standard abrasive materials for uniform lengths of time, the chemist can get some idea of the products' resistance to wear.

CLASSROOM FLOOR TESTS

It is an error to test four types of seal in four buildings. More conclusive results will be obtained if a hall or a classroom in which there is uniform traffic is divided into sections and one kind of seal is applied in each area. It is imperative that the custodian applying these seals know them only as Sample A, Sample B, and so forth, or the seal of a favored salesman may show up as best by some strange method known only to experienced custodians.

Seals and waxes should not be accepted for schoolwide purchasing too quickly. A seal may wear well in a building in an area in which all children play on a surfaced playground and sidewalks, while another brand may stand up better on a floor of a building in a suburban area where there are no sidewalks and much sand and mud are tracked in.

Another way to save money is to know the hardness of the water in the community and to be able to tell custodians exactly how much softener (to a teaspoonful) to use in the water. Such knowledge also is of value in getting one's money's worth out of

JULIUS BARBOUR

Assistant Professor, Building Maintenance
Courses
Michigan State College

the boilers in the heating plant. Testing water hardness, as well as identifying the materials in suspension in the water, can be the job of the chemistry teacher in a small school system.

Some school managers apply a coat of seal to cheesecloth tacked to a wooden frame. After three applications have been made and allowed to dry, they can determine the elasticity or "give" of the seal by slowly flexing the cheesecloth. When several seals are tested at the same time, some idea can be obtained of which will chip or be scuffed off a floor most readily.

The way to test the durability of a paint is to paint a piece of siding, place it under a slow running faucet, and turn on a strong electric fan to simulate the action of blowing rain. In the northern states it would be necessary to place the board in the freezing compartment of a refrigerator for a few hours to simulate winter weather conditions.

CAUTION AS TO QUANTITY

No amount of cautious buying can replace the dollars wasted through inadequate supervision of the issuance and use of supplies. While it is good purchasing practice to buy in large quantities, many schools have found that more square feet of floor space are covered by seals and waxes purchased in 5 gallon cans than by those purchased in barrel lots. When these supplies require turning, spinning or agitation for good mixing before issuance, 5 gallon containers have proved money savers.

On the other hand, such supplies as construction paper may cost 50 to 100 per cent more if purchased in 100 sheet lots because the school has "run out of that color." Here, quantity buying is imperative for dollar saving.

A short school of instruction or a

motion picture on the correct amount of floor seal or wax to use has resulted in a 20 to 25 per cent saving in the use of these materials in various cities. Many workers waste those materials because they do not read the labels on containers or are not shown how to do the required work with a minimum of supplies.

Careful inventory control of the school building stock can save money. One purchasing agent in a city of 85,000 reports that he bought art paper in 1927 which he knows was sent to a certain school. On his return to the building in April 1949 he found some of that same paper mixed in with paper bought last year. The principal admitted that it had been "saved" in case his teachers ever "ran out."

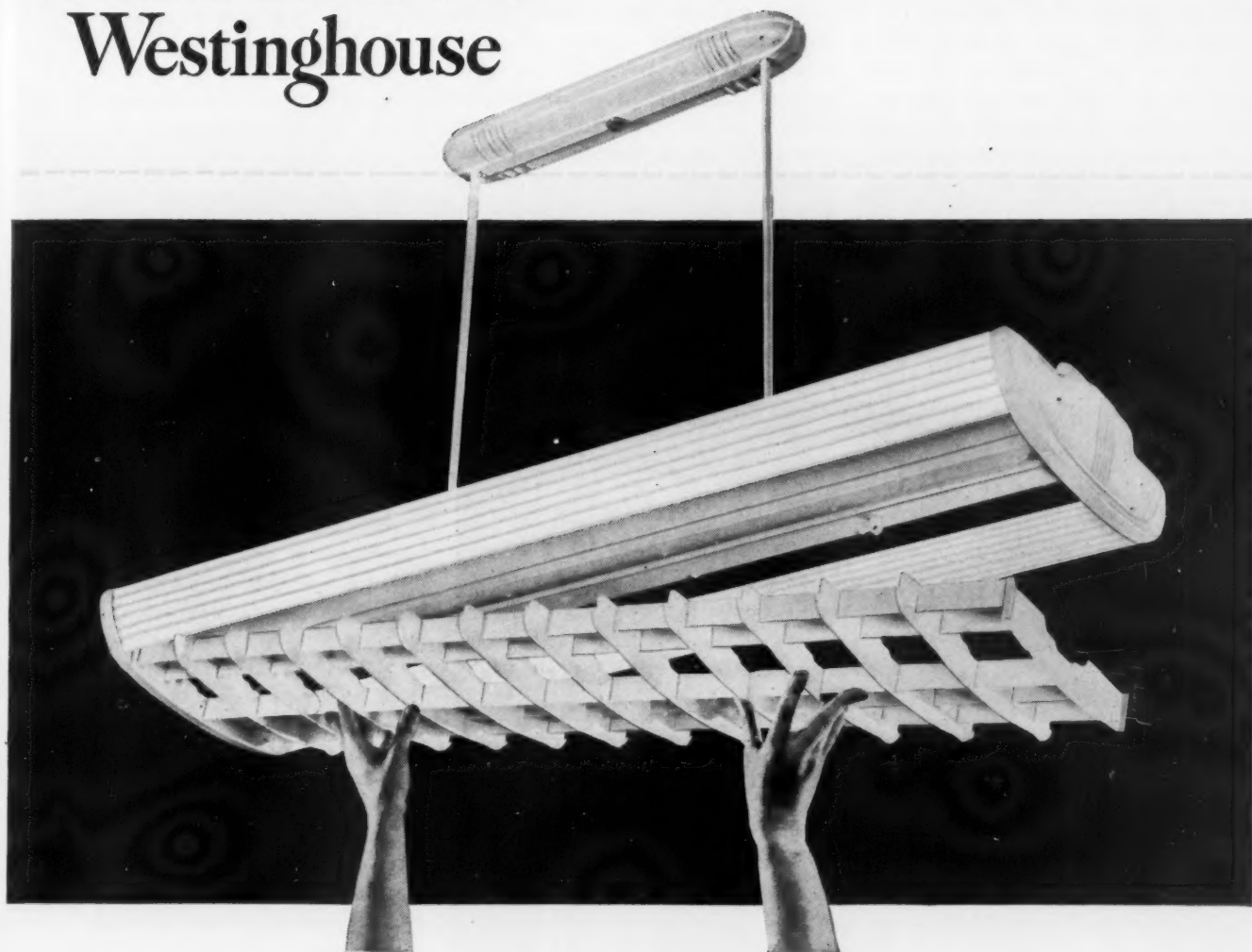
Adequate inventory controls must extend from central warehouse to individual buildings if this type of money waste is to be eliminated. One method is to require a two-column requisition for supplies, one column listing "supplies on hand" and the other "amount needed for coming year."

Larger administrative units appear to be the answer to saving some school district dollars. In North Carolina last year 500 school buses were purchased by the state purchasing commission for \$2650 each. These would have cost individual districts from \$3500 to \$4000 each. Mississippi and Texas also use state agencies for bus purchase, while in New York lower state prices have been obtained for gasoline and oil for school buses.

FROM WHOM TO BUY

In the long run, money is saved by purchasing from companies which (1) meet the standards of the American Society of Testing Materials, 260 South Broad Street, Philadelphia; (2) follow National Bureau of Standards specifications; (3) are not so far away that freight rates increase the cost of their product; (4) are willing to stand back of their products, *i.e.* will take

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Westinghouse



installed and removed

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Light weight, CD-80 and CD-160 fluorescent luminaires for schools and offices are easy to handle—quickly installed—easily maintained.

Louvers or plastic bottom panels may be removed in a “jiffy” for routine cleaning—then just as easily replaced. This means full efficiency of the luminaire at all times—and a timesaver for the maintenance man.

This is but one of the many features of the famous CD series, designed especially for schools and offices. Specify Westinghouse to get lasting performance and quality illumination.

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J-04255

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PLANNED
LIGHTING
PAYS



back a can of wax on your honest word that it is not up to standard; (5) are willing to advertise in a nationally circulated publication the merits of their product, and (6) are willing that you go to an adjoining town to obtain a test sample for experimental use from a school person you know rather than use one they have especially packaged for "trial use."

The school must do its part in dealing with salesmen and their companies if money is to be saved. An order for goods must not be canceled without real cause. Prompt payment should

be made to suppliers. Adequate storage facilities involving a minimum of unload transfers should be arranged. Any specifications should be simply and clearly stated. Orders for more than a single item on which there is little or no profit should be given to salesmen. Open minded attention should be given to explanation of those products which have been proved by other schools to be money savers.

To stretch the school dollar, it is necessary to buy wisely, to distribute judiciously, and to make adequate provisions to prevent waste.

PLASTER FAILURES CAN BE PREVENTED

RESEARCH at the National Bureau of Standards has revealed that plaster failures of the blister type, costing many millions of dollars a year, are caused by the expansion of one of the components of the lime used in preparing the white coat of plaster. Such limes are used in almost all interior walls of buildings and houses. This investigation was followed by the development of methods to treat the lime so that expansion need no longer take place.

"It is difficult to appraise the cost to the public of continual repairs of plastered walls," Dr. E. U. Condon, director of the Bureau of Standards, points out, "but it runs into millions of dollars annually. The bureau knows of many buildings on which is spent from \$5000 to \$10,000 annually as a result of plaster failures."

LIME IS TREATED

If failure of plasters is to be avoided, no disruptive change in volume should occur once setting has taken place. The Bureau of Standards discovered that volume expansion does, however, occur, resulting in bulging, blistering and buckling in the white coat. This expansion results from the gradual combination of water with one component (unhydrated magnesia) of the lime used in preparation of the white coat. Such water adsorption takes place slowly. Most failures occur several years after the white coat has been applied.

Following this discovery, federal experts undertook research to develop a method for treating lime so that such expansion would become impossible. The method involves the use of a large autoclave—a kind of pressure cooker—in which heat and moisture are used to effect a chemical bonding of water with the components of the lime. The resulting compound is stable with respect to water; consequently it does not expand and thus eliminates plaster failure.

NOW A DOLOMITIC LIME

The results pointed the way to commercial application of the method, and manufacturers are now producing a dolomitic lime—one with the magnesia so well hydrated that harmful expansion does not take place.

ASSURED UNIFORMITY and QUALITY

FOR FLOORS

ANTI-SLIP
HIGH GLOSS
WATER RESISTANT
WEARS LONGER
NO RUBBING

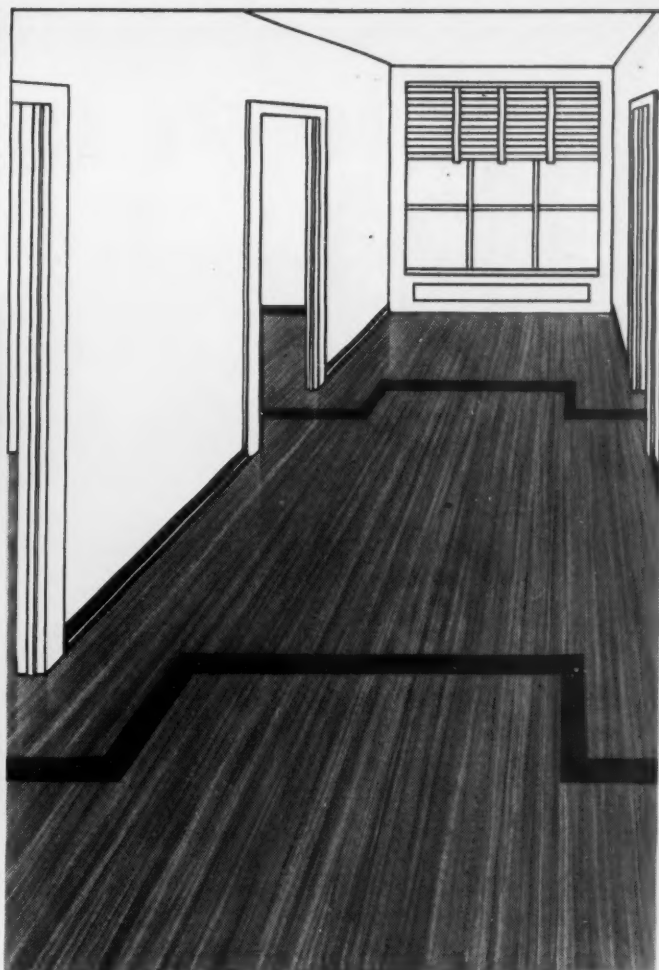
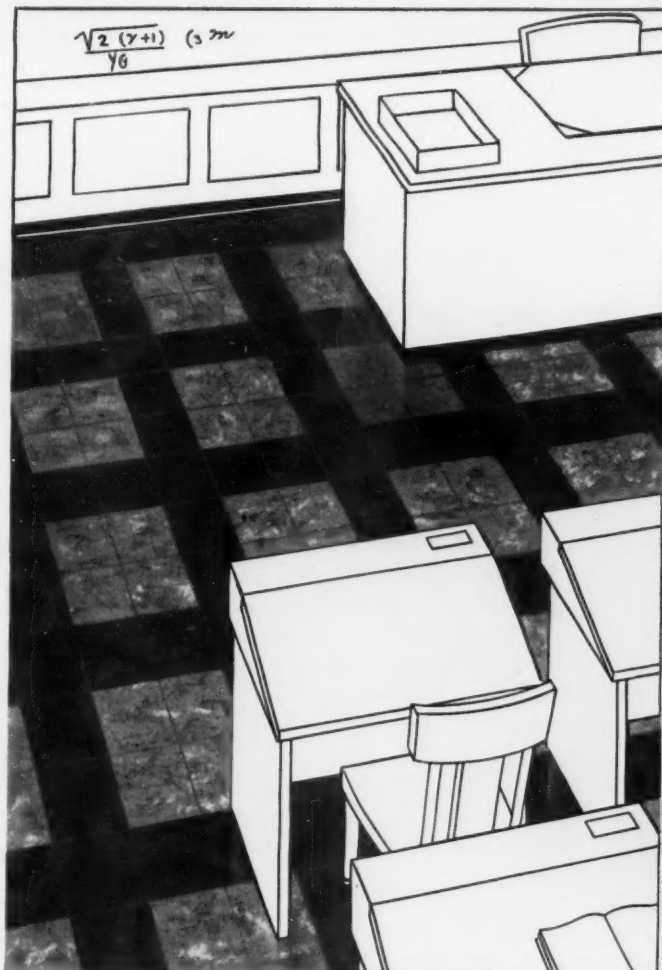
FRANKLIN'S

RUBBER GLOSS

WAX

FRANKLIN RESEARCH COMPANY - PHILA., PA.

THE STANDARD of COMPARISON

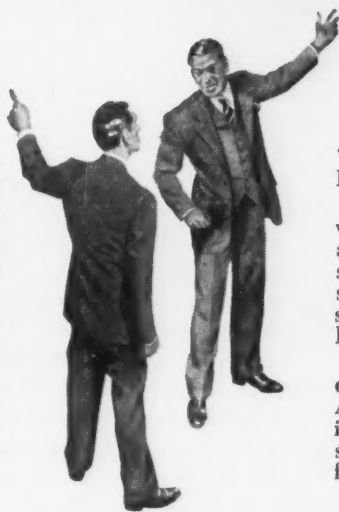


"Asphalt tile is the best school floor!"

"When we set about modernizing our school, we decided that a step in the right direction would be to install attractive, new floors of Armstrong's Asphalt Tile. If you come over and take a look, you'll see how right we were. The new floors make the school look so much better—clean and bright and modern.

"We were able to save a little money, too, because the initial cost of the floors was surprisingly low. But in spite of the low cost, I don't think we sacrificed a thing when we picked Armstrong's Asphalt Tile. It really takes the wear and tear of children's feet.

"What's more, thanks to Armstrong's Asphalt Tile, maintenance time is way down.



"Linoleum is the best school floor!"

"I'll admit you've got something there, but I think I can match your story—and top it!

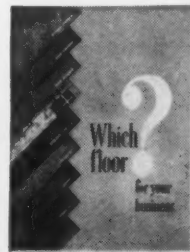
"Before we made plans for our new school we looked for ideas in other schools clear across the state. We saw a lot of Armstrong's Linoleum Floors. And we heard superintendents say how easy and inexpensive it is to maintain. After that, it wasn't hard to decide what floor we wanted.

"Now that it's been down a few years, our own experience tells us—you can't beat Armstrong's Linoleum. We've found that its smart, efficient look is an asset to the school. And it's got a resiliency that cushions footsteps—cuts down noise and clatter.

ARMSTRONG MAKES BOTH asphalt tile and linoleum, so maybe we can help settle this argument. Actually, there is no one "best" floor. To get the floor that's best for your school there are many factors to consider—the over-all appearance, the money you want to spend, the type of subfloor you have, the conditions to which the floor will be subjected.

For long wear and ease of cleaning, Armstrong's Asphalt Tile and Armstrong's Linoleum are about equal. On other points, each floor has its own characteristics. Asphalt tile usually costs less, but linoleum is often preferred for its richer coloring and greater resiliency. If your subfloor is in contact with the ground, you need asphalt tile for its alkaline moisture resistance,

To help choose the best floor for you, here's what we suggest. **Drop us a card and we'll send you our new booklet—"Which Floor for Your Business."** It gives you all the facts on both Armstrong's Asphalt Tile and Linoleum, plus facts on other Armstrong's Resilient Floors. For your copy, write Armstrong Cork Company, Floor Division, 3708 State St., Lancaster, Pa.



ARMSTRONG'S FLOORS

LINOLEUM  ASPHALT TILE

LINOTILE® ★ RUBBER TILE ★ CORK TILE

NEWS IN REVIEW

Welfare Department Threatens to Swallow Office of Education... No Construction Aid at This Session of Congress . . . Barden Bill Called "Un-Catholic" . . . New Policy for Surplus Property . . . Some Larger High School Classes Are Possible

No Construction Aid From Congress Now

WASHINGTON, D.C.—The need for federal dollars to help states build school plants "has been thoroughly established" in Capitol Hill hearings throughout June, according to the National Council of Chief State School Officers.

Beyond that, however, little action is expected at this session of Congress on several bills that seek federal aid for school construction.

Led by Commissioner of Education Earl J. McGrath, witnesses placed in the record testimony on the critical need for classrooms and the inability of states to meet the need. "It will take at least 250,000 additional classrooms to house the pupils coming to schools during the next 10 years," Mr. McGrath told the Senate subcommittee on school construction. Senator Humphrey (D.-Minn.) presided at most of the hearings, although Senators Aiken (R.-Vt.) and Hill (D.-Ala.) took the chair on several occasions. All three senators testified in favor of school construction legislation.

Most witnesses supported S. 287, by Sen. Neely (D.-W.Va.), although hearings were technically concerned with four other bills. The Neely measure seeks \$5,000,000 for school surveys to be carried on by states; \$72,750,000 to begin a "modest" program in accordance with a "wise formula," and \$72,750,000 for emergency school construction in districts where federal activities have boomed enrollment.

The bill's supporters devoted much of their testimony to outlining the principles they believe should be written into legislation for federal-state school construction cooperation. Among points stressed by the National Council of Chief State School Officers are:

1. Federal funds should be made available to states for careful surveys to develop long-range plant programs.

2. Federal funds should be channeled through the state departments of education. Local school systems should receive money in accordance with statewide plans.

3. A federal education agency, not a public works agency, should administer the legislation from Washington.

4. An objective formula, not political or other considerations, should govern distribution of funds from Washington to states and from states to local school systems.

5. Statewide plans for district reorganization should be aided, rather than disrupted, by federal participation.

N.E.A. Would Ban Red Teachers

WASHINGTON, D.C. — American youth should be taught the "principles and practices of the Soviet Union and the Communist party of the United States, but Communists themselves should not be permitted to hold teaching positions," a report of the N.E.A. Educational Policies Commission released June 8 declared.

The 54 page document entitled "American Education and International Tensions," was the work of a group headed by Dr. John K. Norton of Teachers College, Columbia University; it included Gen. Dwight D. Eisenhower and Dr. James B. Conant among its members.

At the same time the committee condemned the "careless, incorrect and unjust use of such words as 'Red' and 'Communist' to attack teachers and other persons who in point of fact are not Communists but who merely have views different from those of their accusers. The whole spirit of free American education will be subverted unless teachers are free to think for themselves."

The commission made no effort to lay down a detailed school program.

Federal Welfare Department Swallows Up U.S. Office

WASHINGTON, D.C.—On June 20 President Truman sent to Congress his Reorganization Plan No. 1 to create a Department of Welfare for the administration of the programs now under the Federal Security Agency.

Date of message is important, since 60 days after its transmission the department would automatically come into being unless (1) Congress adjourns before the 60 days' expiration or (2) either House specifically votes to turn down the plan. Neither of these is expected to happen before August 20, when most observers believe the department will become an actuality.

Mr. Truman's proposal follows the major suggestions of the Hoover Commission which studied the organization of the government. Educators, however, have generally opposed incorporation of education in a welfare department. The A.A.S.A. and other groups have gone on record for an independent national board of education.

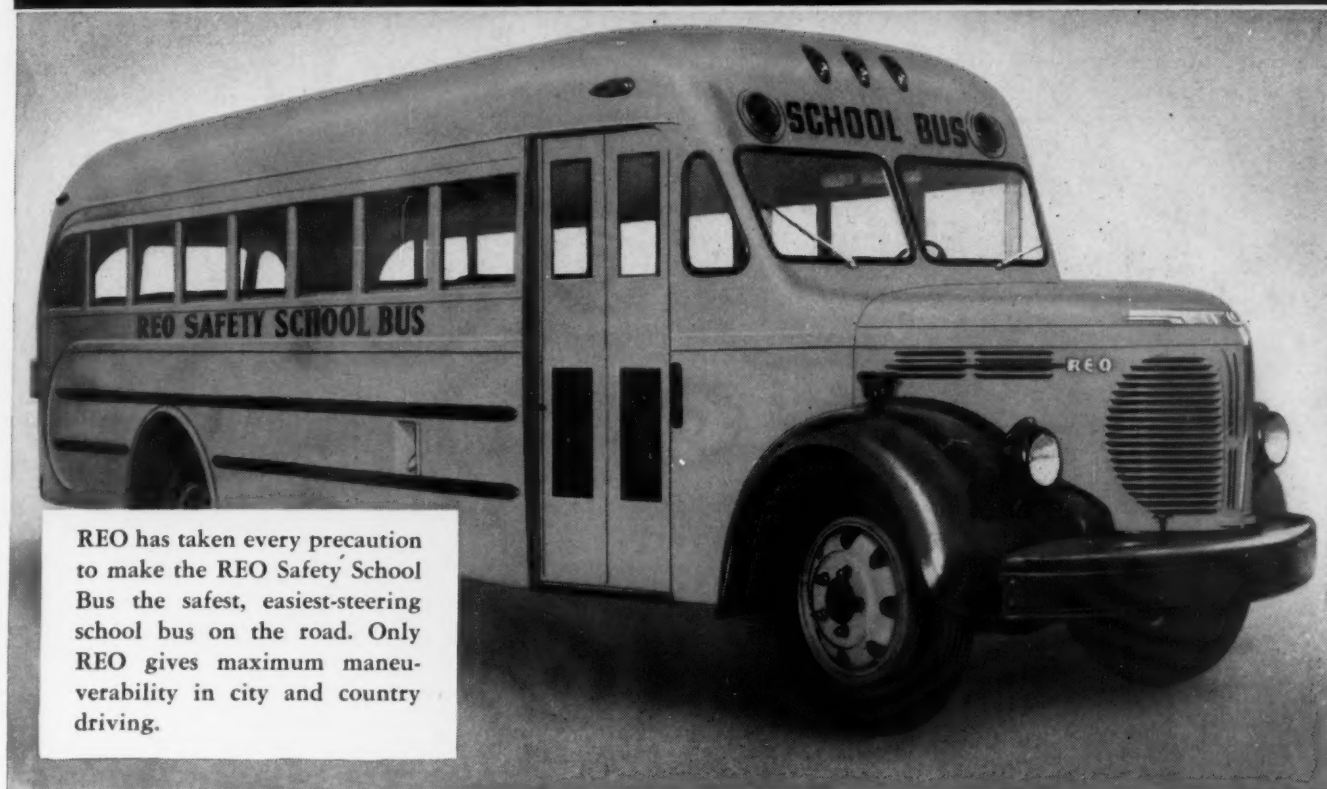
Barden Bill Attacked as "Un-Catholic"

WASHINGTON, D.C.—Efforts of Representative Barden (D.-N.C.), head of the House subcommittee on education, to get approval of a federal aid to education bill in the House brought attacks last month from three sources:

Cardinal Spellman of New York denounced it as "un-Catholic" and "un-American" because its provisions would prohibit use of federal funds for transporting private and parochial school children to school.

Chairman John Lesinski (D.-Mich.) of the powerful House committee on education and labor followed a few days later with the charge that the bill is "antireligious." Mr. Lesinski added: "It is my opinion that Mr. Barden drew the

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NEWS...

bill up that way purposely because he didn't want any aid to education and wanted to kill it." Mr. Barden denied that charge.

The American Federation of Labor placed itself in opposition to the Barden Bill because it does not provide for scholarships or for eradication of illiteracy, important A.F.L. education planks.

Latest word from Chairman Lesinski is that he is drafting a new school aid measure which will provide health, transportation and welfare services to all children in private and public schools. Observers believe, however, that Mr. Lesinski will compromise on a bill paralleling the Senate passed Thomas-Taft measure.

The Senate bill permits the individual states to decide whether to aid parochial and private schools.

More Responsibility Antidote for Delinquency

DANVILLE, KY.—Centre College of Kentucky and 10 Danville civic groups sponsored a statewide conference on juvenile delinquency on June 14 and 15. Designed especially for parents, teachers,

ministers, social workers and youth leaders, the conference speakers stressed the importance of playgrounds, keeping children in school, giving children guidance in school, and cooperation between schools and juvenile officers.

Dr. Edward F. Reaser, superintendent of Huntington State Hospital, Huntington, Va., directed attention to the growing lack of respect for law in our national life and said we should reexamine our system of education with that in mind.

Judge Camille Kelley of the Memphis Juvenile Court declared: "Behavior is just as curable as TB. One of the cruellest things we have done to the child is not to teach him obedience. Spiritual malnutrition is the cause of much delinquency. Goodness needs a press agent," declared the woman judge who has tried 50,000 juvenile cases.

Judge Ida May Adams of Los Angeles Municipal Court stated that the pendulum has swung from opposition to child labor and its laws to belief in little work for children and allowing them no responsibility. Boys' gangs are the symptom not the cause of delinquency.

National Headquarters for School Boards



E. M. Tuttle

CHICAGO. — A full-time executive secretary and a national headquarters have been achieved simultaneously by the National School Boards Association. In charge of the headquarters office at 450 East Ohio Street, Chicago 11, is the new executive secretary, Edward M. Tuttle, former editor-in-chief of Row, Peterson and Company, textbook publishers. Mr. Tuttle plans to spend much time with the state associations.

How 860 Administrators Practice Democracy

WASHINGTON, D.C. — What school administrators think and do about involving citizens, teachers and pupils in planning educational policy is described in a report by the National Conference of Professors of Educational Administration.

The study presents the views of 860 public school administrators. Most of them accept the theory that lay citizens, teachers and pupils should help plan and develop school policies and programs. "That this acceptance is largely verbal is also quite clear," the report states.

Highlights of the findings show:

1. A relatively small group of administrators still clings to the philosophy of "separatism." That is, they believe that the schools have been "turned over" to professionals (meaning the administrator) for better or worse. They insist that the administrator is the "doctor" of all school problems.

2. An "encouragingly substantial" number of administrators are trying to find practical means for getting the help of lay groups, teachers and pupils in policy planning.

3. The greatest progress has been made in obtaining teacher participation. About two-thirds of the superintendents reported that through faculty meetings, advisory councils, and teacher workshops, the staff takes part in policy and program development. Very few superintendents, however, submitted detailed descriptions of new teacher participation devices.

4. Only one-third of the superintendents gave facts that reflected pupil participation in the planning of policies.



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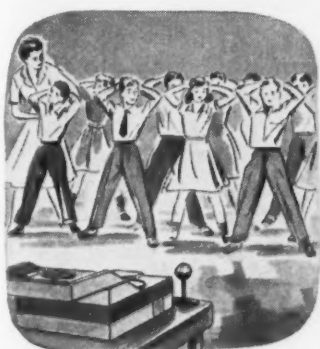


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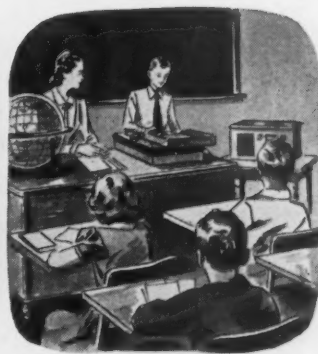
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NEWS...

"It seems clear that in many schools there exists a traditional dualism between faculty and administration on the one hand and the students on the other, both engaged in an ignoble game of wits," says John Lund, federal specialist in the education of school administration, who is author of the report.

The illustrations as well as the detailed analysis of responses from superintendents are summarized in "Educational Leadership in Action." Copies of the 14 page leaflet may be obtained free

from John Lund, U.S. Office of Education, as long as the supply lasts.

New Policy and Agency for Surplus Property

WASHINGTON, D.C.—President Truman signed a bill on June 30 creating a new agency and a new policy for distribution of surplus property to schools and colleges.

The new Federal Property and Administrative Services Act abolishes the War Assets Administration, the Federal

Works Agency and the wartime surplus property laws under which they operated. In their place is created the General Services Agency, headed by Administrator Jess Larson, former W.A.A. head.

Of interest to educators are two sections of the new law:

Title II, section 203j, authorizes both civilian and military agencies to donate surplus property to schools, colleges and nonprofit institutions. Extension of donations authority to civilian federal agencies is a new feature of the surplus property program for education.

Section 203k permits the sale of surplus real property to schools and colleges under a discount system only until Dec. 31, 1949. Discounts and preferences on personal property for education are abolished.

Many Protest Tactics of Sons of Revolution

WASHINGTON, D.C.—Here is the record of the House un-American activities committee's effort to look into "subversiveness in education," as reconstructed from official and unofficial sources:

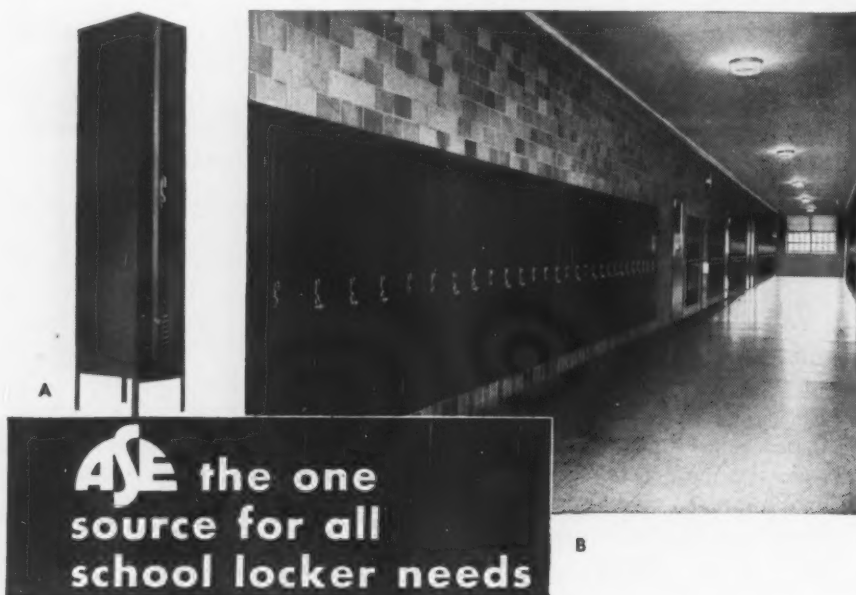
April 16: The National Sons of the American Revolution convention approved a "Bill of Grievances" charging that schools and colleges are using large numbers of "subversive" textbooks.

April 23: Delegates from the Sons of the American Revolution presented the "Bill of Grievances," together with a petition for investigation, to Chairman Wood of the un-American activities committee.

May 17: Chairman Wood began sending letters to selected colleges, school systems and state departments of education which read: "The committee on un-American activities is desirous of obtaining lists of textbooks and supplementary reading, with names of authors, in use in our educational institutions throughout the country in the fields of American literature, geography, economics, government, philosophy, history, political science, and any other of the social science group.

"Since we have immediate need for this material, the committee will very much appreciate your cooperation in making this material available to us at the earliest possible date." Names of school systems and colleges were selected "at random."

June 11: A few lists but many more protests reached committee members.

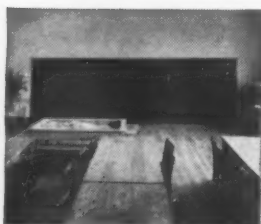


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The complete line of A-S-E Lockers will meet your every requirement for design or budget.

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NEWS...

June 13: Most members of the committee denied they were consulted on the move. Chairman Wood took responsibility. Protests from educators began to worry members of the committee as well as other senators and congressmen.

June 17: Committee sent a second letter to more than 500 educators, including the institutions to which the first letter was sent. Dubbed an "afterthought" letter, it tried to assure educators that the request for lists of textbooks did not imply criticism of their Americanism; that lists of supplementary references need not be sent, and that the committee does not wish to interfere with freedom to learn and freedom to teach.

June 21: Chairman Wood explained that lists sent by colleges and universities will be reviewed to see if they contain any of the texts listed by the Sons of the American Revolution as "subversive." He denied persistent reports that the investigation will be called off.

Favors Larger Classes for Some Subjects

WASHINGTON, D.C. — Large classes are desirable for some high school subjects when capable teachers are on hand to direct them, a number of school administrators believe.

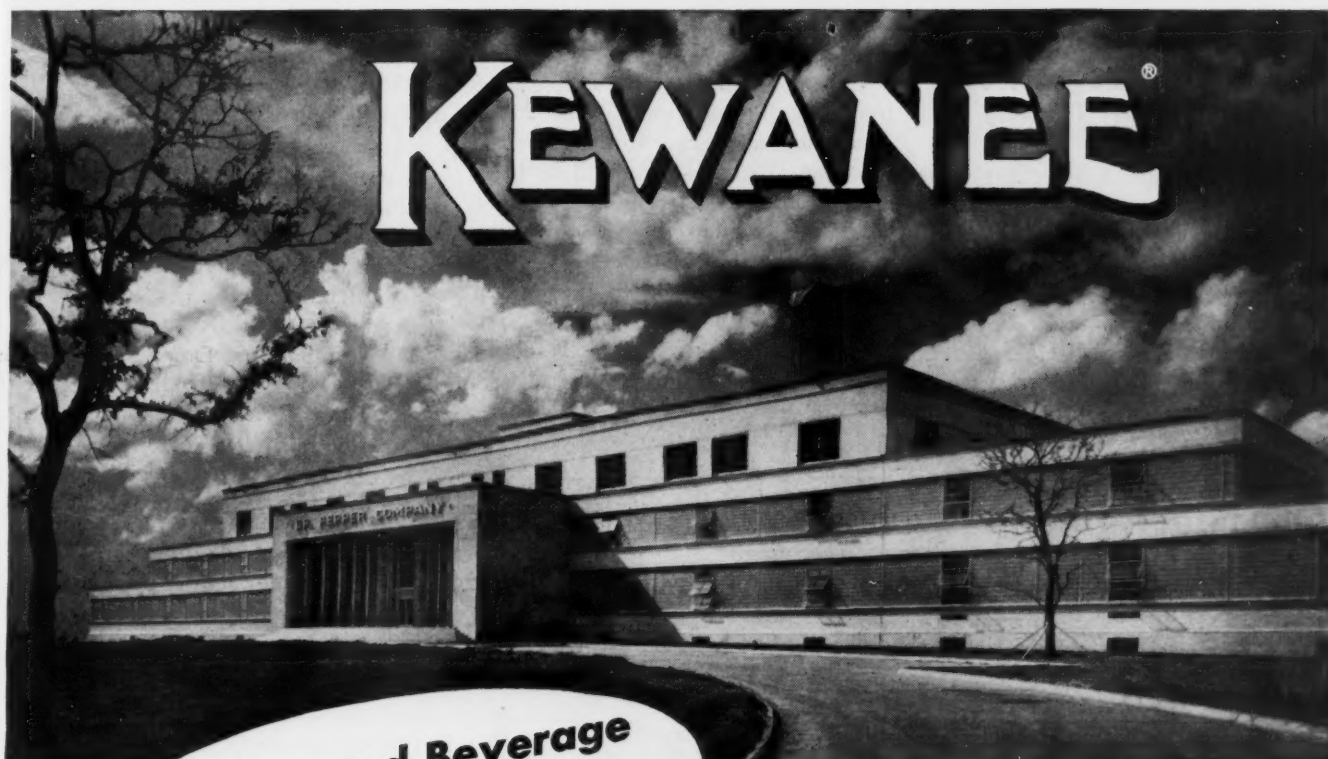
Typewriting, physical education, chorus, band, orchestra and safety-patrol technics are among areas for which enrollment as high as 75 pupils or more is favored by some schoolmen.

For other subjects high school officials express a desire to reduce class size but are far from agreeing what constitutes the ideal. Half the large public high schools in the country (1000 or more enrollment) have pupil-teacher ratios from 21:1 to 26:1. Classes of 50 or more predominate in physical education, music and typing but are rare in academic subjects.

Referring to typewriting classes, one administrator writes: "We have demonstrated beyond a doubt that a good teacher can teach a class of 72 students just as easily as she can teach a class of 30. . . . Large classes are much more challenging and interesting than are small classes."

Opinions on class size are reported in a new Office of Education leaflet, "Class Size: The Larger High School," available at 10 cents a copy from the Superintendent of Documents, Washington 25, D.C.

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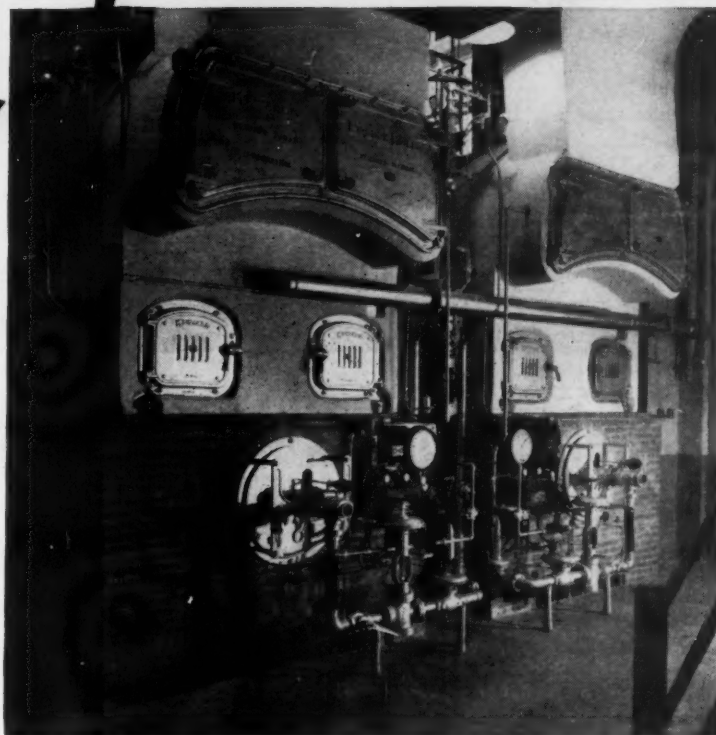


Carbonated Beverage Process Steam and Heating Boiler Plant

This new home of the Dr. Pepper Company in Dallas, Texas has been called the *most modern and best equipped syrup plant in the world*. Fine quality of product and the unique slogan under which it is advertised . . . "Drink a Bite to Eat" . . . have made "Dr. Pepper" tops in America's giant beverage industry.

Appropriately this plant . . . 26 acres of modern beauty and efficiency . . . is served by Kewanee Boilers. The extra value built into every Kewanee, and at no extra cost, makes it the logical boiler for outstanding buildings of all types and sizes.

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Thomas, Jameson & Merrill were architects for Dr. Pepper's palatial Headquarters at Mockingbird Lane, Dallas, Texas, and the Engineers were Zumwalt & Vinther. The Kewanee gas-fired firebox boilers which will deliver ten million heat units apiece, steaming at 100 lb. working pressure were ordered thru Southland Supply Co., Dallas and installed by C. Wallace Plumbing Co., Summer Street, Dallas, Texas.

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NEWS...

Connecticut Votes \$9,000,000 to Improve Teacher Training

HARTFORD, CONN.—Serious overcrowding of four Connecticut state teachers colleges will be relieved by passage of a bill which calls for nearly \$9,000,000 for the physical expansion of the colleges. In addition, the state department of education, in cooperation with the presidents of the four schools, has authorized an experimental emergency teacher training plan which will begin this year.

College graduates who lack teacher training will receive intensified technical instruction and experience in practice teaching. Their selection will be based on academic records, a psychological examination, and an interview before a special committee. Trainees may begin their regular classroom teaching in September but will be assisted by supervisors. They will continue their in-service training until they are recommended for full certification according to their individual achievement and ability.

Custodians' School at Purdue Draws 200

WEST LAFAYETTE, IND.—School custodians met at Purdue University June 13 and 14 for the university's 13th annual custodians' conference. Nearly 200 persons from 41 Indiana towns and cities attended; five cities outside the state were represented.

Dean Walker, state superintendent of public instruction for Indiana, told the group that the custodian is one of the most important elements in the school system.

To Dr. N. E. Viles of the U.S. Office of Education, another featured speaker, the custodian is one of the schools' best possible sources of publicity.

"If the summer maintenance program is to be an effective job, it must be planned by March 1 of each year," declared Robert Brown, custodial specialist of the 4th Army Service Command, Fort Sam Houston, Tex.

Dr. R. B. Stewart, vice president and controller of Purdue University, told the custodians that "an intelligent school maintenance program is as important a part of education as is classroom teaching."

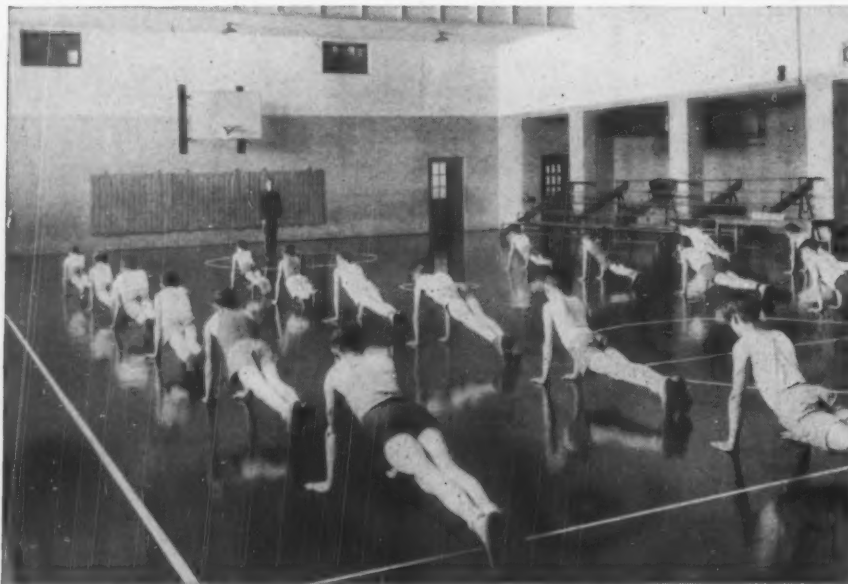
"School lawns, shrubs and trees are the outward signs of good housekeeping," according to R. B. Hull, extension horticulturist of Purdue. "As the public passes by or approaches a school building, it judges proper maintenance in that way."

School custodians present made several suggestions for future programs; among them: (1) have more demonstrations of various custodial tasks; (2) have someone at Purdue publish a monthly bulletin for school custodians in Indiana.

A group of commercial exhibitors were present to demonstrate various types of commercial cleaners, supplies and equipment used by school custodians.

Next year's dates for the annual Indiana conference are June 12 to 14.—GEORGE H. BUSH, *school building specialist, Purdue University.*

Gym-floor, Dance-floor and Auditorium?



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Solves the problem of the MULTI-PURPOSE FLOOR

THE FLOOR of a gym used for public gatherings as well as class work will look nicer, longer if it is protected by Penetrating Seal-O-San. The reason is simple. Seal-O-San provides a resilient surface that actually becomes part of the wood. It penetrates deeply . . . fills the pores . . . and reinforces the wood grain. Dirt and dust stay on the surface of a Seal-O-San floor where they may be easily removed. Protect your gym floor with Seal-O-San. Easy to apply. Pays for itself in lower maintenance costs and longer life.

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ADDRESS	
CITY	STATE

Moves to Cleveland

CLEVELAND.—The American Association for Adult Education has transferred headquarters from New York City to this city. The new address for the association and its publication, *Adult Education Journal*, is 167 Public Square, Cleveland 14.

LOOK AT THE *Facts*

BEHIND ACCIDENT REPORTS



"Parking Brake Accidents" are not the only ones for which inadequate emergency brakes are to blame

THE INTERSTATE COMMERCE COMMISSION analyzed 214 "Parking Brake Accidents" to vehicles other than private passenger cars. Of these 143 or 66.8% were attributed to insufficient capacity of the brakes.

Obviously these accidents could and should have been prevented. But that is only part of the story.

PREVENTABLE ACCIDENTS

The I.C.C. has no means of finding out how many accidents—other than "Parking Brake Accidents"—could have been prevented with good, strong emergency brakes. They may run into the thousands.

Suppose, for example, the driver of a school bus suddenly finds that only a sudden stop will prevent a crash. His service brake doesn't stop the bus fast enough. He applies his hand brake—instinctively.

If he has a good, powerful emergency brake, the crash is avoided. If he hasn't, the accident will be attributed to any one of a dozen causes. Certainly it will not be called a "Parking Brake Accident."

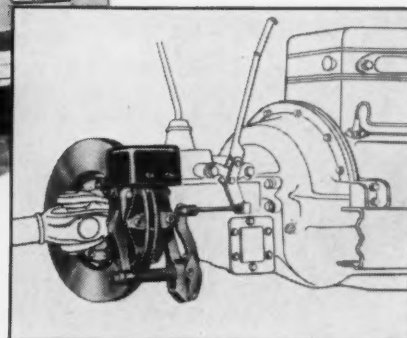
"MANY PARKING BRAKES INSUFFICIENT"

The following is quoted from a report released August 9, 1948, by I.C.C. Bureau of Motor Carriers, Section of Safety: "We must continue to emphasize, as in the past, that many parking brakes are insufficient in capacity, even when new, for the loads to be transported and after use they seem to be still less able to perform, reliably, the functions for which they were intended."

GOOD EMERGENCY BRAKES AVAILABLE

Fortunately, a large percentage of new school buses are equipped with TRU-STOP Emergency Brakes. Most chassis manufacturers provide TRU-STOP, either as standard or optional equipment. And TRU-STOP Emergency Brakes are powerful enough to substitute for or supplement service brakes—in addition to serving as parking brakes.

TRU-STOP is an independent braking



TRU-STOP Emergency Brakes have a reserve of braking power. This is largely due to the unique "ventilated disc" construction. The intense heat generated in the braking process is quickly dissipated.

system with disc type brake. It is engineered to decelerate, stop and hold the loaded vehicle from speeds up to 50 M.P.H.—repeatedly. TRU-STOP is in every sense a true Emergency Brake.

SEND FOR COMPLETE INFORMATION

Considering the safety of TRU-STOP Emergency Brakes as contrasted with the hazard of ordinary "parking brakes," the small additional cost of TRU-STOP becomes negligible.

It is important that anyone responsible for specifying, buying or authorizing the purchase of school buses should know the facts about TRU-STOP Emergency Brakes. Use the coupon below or write us for full information.

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Please send me information about TRU-STOP Emergency Brakes for school buses.

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Be sure that your floors reflect their full, vital "personality." It's easy to achieve when you use a HILD Floor Machine.

This powerful machine has easily interchangeable attachments to perform every kind of maintenance job. It will scrub, wax, polish, buff, sand, steel-wool or grind. The machine's precision balance and self-propelled action make it less tiring to operate . . . invite frequent, thorough maintenance. Capacitor-start motor assures long, trouble-free service. Made in four sizes . . . a correct size for every floor area.



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NEWS...

G.I.s Prepared for Crowded Teaching Fields

WASHINGTON, D.C.—As V.A. announces that nearly 100,000 veterans "are preparing for teaching careers," educators reply that most of the G.I. trainees are heading for overcrowded teaching fields, owing in part to faulty guidance and advisement.

Of the 100,000 veterans taking courses in education, only 1499 are preparing for elementary school teaching, the area of greatest teacher shortage. Nearly 6000 are preparing for industrial arts, 7000 for general high school teaching, and—most unhappily—14,200 for physical education.

All three of these fields, especially physical education for men, have a surplus of teachers, according to the 1949 national teacher supply and demand study completed by the National Commission on Teacher Education of the N.E.A.

School Committee to Study Causes of Defective Vision

NEW YORK.—A special school survey committee of the New York State Optometric Association will study the causes of defective vision among school children.

Walter J. Wittmann, retiring president, reported at the association's annual meeting that one out of every five school children suffers from defective eyesight in some form.

In a resolution calling for a committee to study the problem, the organization said, "The demands of modern education are such as to cause widespread visual problems among school children, and it is in the public interest that these visual problems be discovered and corrected."

In addition to a program of statistical research on the causes and method of correcting visual problems, the committee will evaluate and analyze the various methods of screenings now used.

COMING EVENTS

JULY

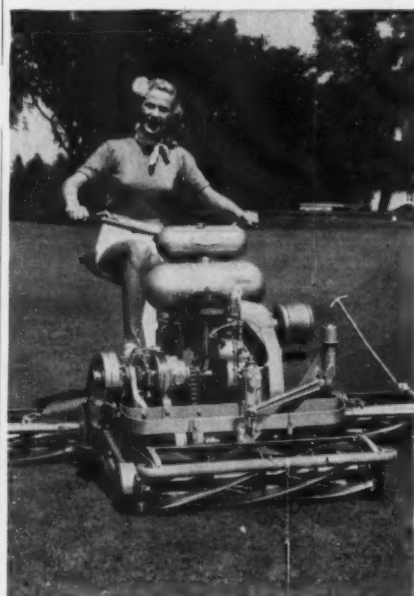
25-29. School Buildings Conference, School of Education, University of North Carolina, Chapel Hill.

25-Aug. 19. N.E.A. Institute of Organizational Leadership, Washington, D.C.

AUGUST

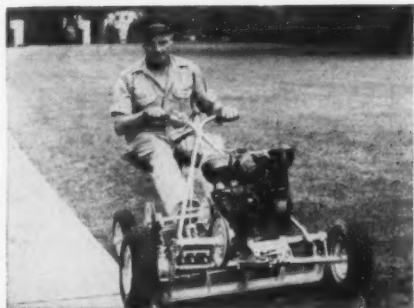
28-Sept. 3. National Conference of Professors of Educational Administration, Clear Lake Camp, Battle Creek, Mich.

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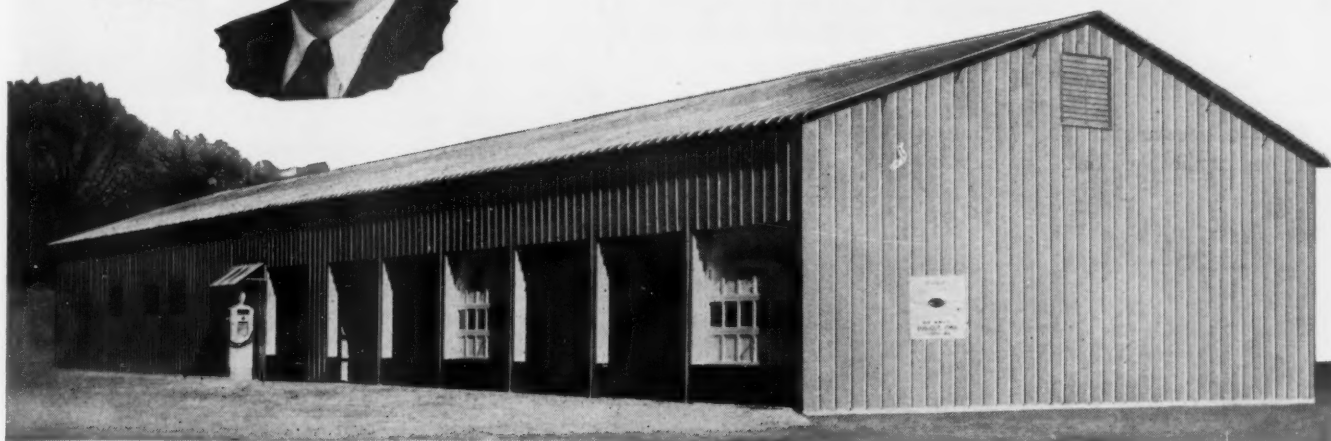
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NEWS...

Larsen Addresses State Administrators' Meeting

OLYMPIA, WASH.—More than 400 school people and friends of education attended a five-day meeting sponsored by the office of Pearl A. Wanamaker, state superintendent, June 13 to 17. It was the fourth annual School Administrators' Mountain Conference and was held at Paradise Valley, Mount Rainier National Park.

Principal speakers were Roy E. Larsen, chairman of the National Citizens Com-

mission for the Public Schools, and president of Time, Inc., and Dr. Louis Rath, director of research at the Center for Research and Evaluation, New York University School of Education.

Mr. Larsen urged that local committees of laymen be organized in each community in support of local schools. Dr. Rath made three addresses.

Conference sessions were punctuated by fireside programs in the evening, dancing in the lobby, nightly snacks and the annual Talent Night program.

NAMES IN THE NEWS

SUPERINTENDENTS...

Dr. Forrest Edward Conner, superintendent of schools at Kenosha, Wis., since 1944, has succeeded Selmer H. Berg as superintendent of schools of St. Paul, Minn., with a starting salary of \$12,000. He had been secondary school supervisor at Hibbing, Minn., from 1937 to 1944. Mr. Berg recently signed a six-year contract as superintendent at Oakland, Calif.



F. E. Conner

Granville R. Griffin, superintendent of schools at Welch, Okla., goes to Vinita, Okla., to fill out the unexpired term of R. B. Johnson, who died last winter.

William H. Soule of Phillips, Me., has been named superintendent of School Union 13, embracing the towns of Falmouth, Cumberland and North Yarmouth. Former superintendent of School Union 36 at Phillips, Mr. Soule succeeds the late Rolf B. Motz.



M. B. Rogers

Malcolm B. Rogers, superintendent of schools at Willow Run, Mich., since 1943, has been appointed superintendent at Meriden, Conn., succeeding Raymond N. Brown. Previously,

he had been superintendent at Zeeland, Mich., for thirteen years. Dr. Rogers will take office July 31. Ralph M. Van Volkinburg succeeds him at the Willow Run village schools.

Byron W. Hoff, superintendent at Placedo, Tex., and former instructor at the Brayton Flying School, is the new superintendent of the Tivoli and Austwell Independent School District, Cuero, Tex.

Dr. Walter L. Collins recently resigned as superintendent of schools at Kenton, Ohio, will become superintendent of the West Alexandria schools in the same state.

Dr. J. P. Harris, after forty-three years in teaching, will quit his present post as superintendent of Dallas County Schools in Texas on Jan. 1, 1951. His successor will be L. A. Roberts, superintendent at Grand Prairie, Tex.

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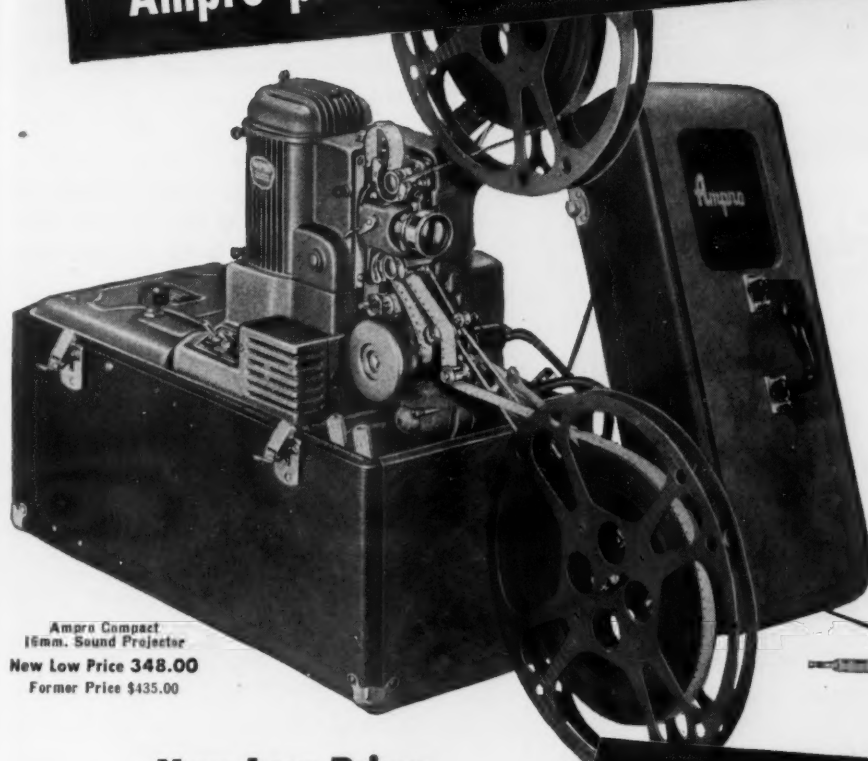
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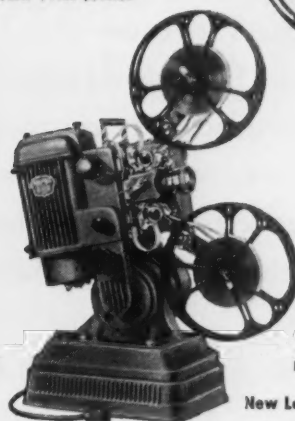
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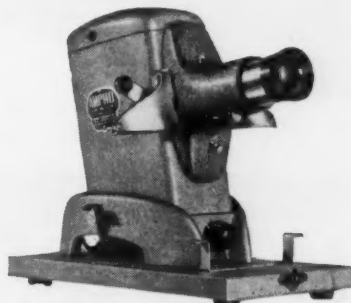
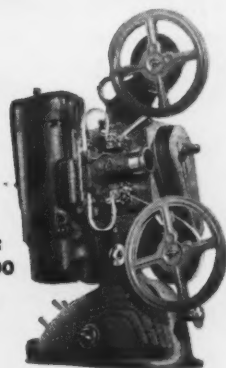
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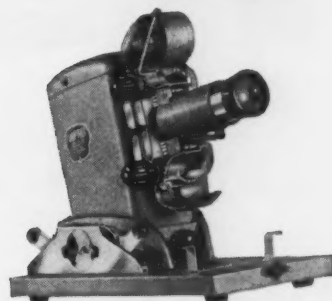


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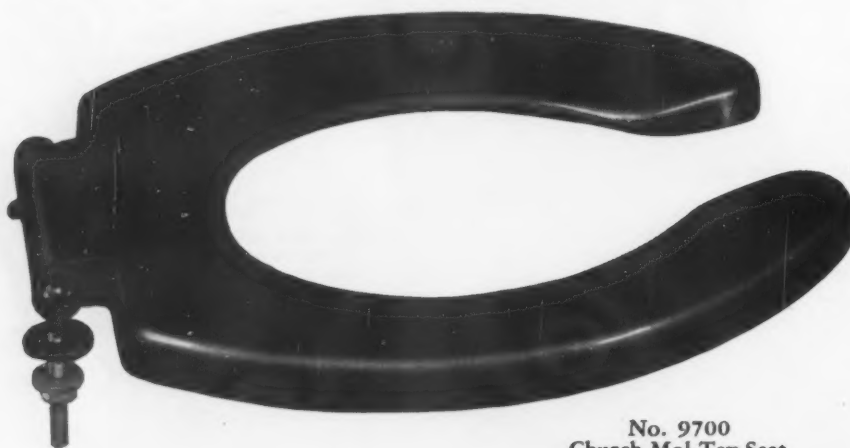
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NEWS...

Arthur D. Jones, high school principal at Walla Walla, Wash., has been named assistant superintendent of School District 110 in that city.

Dr. George M. Geyer, until recently chief of the California State School Redistricting Commission, has been appointed assistant superintendent and business manager of schools at San Diego, Calif. He succeeds **Dr. J. Chester Swanson**, who resigned to become assistant superintendent of schools at Oklahoma City, Okla.

PRINCIPALS...

Roy Dennis, high school principal at Kelso, Wash., for the last five years, has been appointed principal of the Meridian High School at Kent, Wash.

Edgar A. Poe is one of three principals recently appointed at Pittsburg, Calif. Mr. Poe was former principal of Portola School and is now head of Pittsburg High School. **Donald B. Mitchell** of Leon, Iowa, is the new head of the junior high school, and **Edward J. Johnson** of Oregon City, Ore., heads the new elementary school.

Norman R. Hartfiel, former headmaster of Simonda Free High School, Warner, N.H., has been elected principal of Peoples Academy, Morrisville, Vt.

Fred Eason, assistant principal of Needham Broughton High School, Raleigh, N.C., has been appointed principal of the high school at Elizabeth City, N.C. He will work under **Earl Funderburk**, recently named superintendent of Elizabeth City schools, succeeding **J. G. McCracken**.

H. H. Hightower, supervisor of elementary schools of District No. 40, Effingham, Ill., has been appointed supervising principal of elementary schools in Mattoon, Ill.

Arthur H. Ahlschwede, principal of Trinity Lutheran Junior High School in Minneapolis, has been appointed as first high school principal at Concordia Junior College, St. Paul. Concordia is separating administration of its high school division from the college department.

Raymond E. Seitz, principal of Thomas Jefferson School, St. Louis, is retiring. Mr. Seitz has spent 20 years as a principal of schools in the Normandy school district in St. Louis.

Frederick I. Godshalk will be principal of the new Lakeview Junior and Senior High School at Decatur, Ill., when it opens in September. Mr. Godshalk

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It's the new General Electric T-12 slimline.

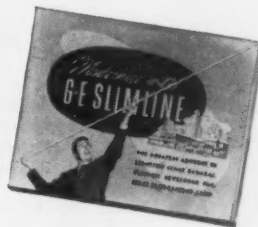
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At left is 40-watt fluorescent lamp. At right are General Electric's two 96" slimline lamps—the T-8 (1" diam.) and the new T-12 (1½" diam.)

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NEWS...

has been with the high school visitors' office of the University of Illinois since February 1947.

T. Chubb Conduct of Malden, Mass., has been appointed principal at North Troy, Vt.

S. G. Green, principal of Holloway High School, Murfreesboro, Tenn., has been elected principal of John F. Slater High School, Bristol, Tenn.

A. R. Hafner, principal of University High School, Columbia, S.C., will become principal of the new Eau Claire

High School in the same city when it opens this fall. **C. B. Harvey**, mathematics teacher, will succeed Mr. Hafner as principal of University High School.

Clifford G. Owens has been named principal of the new \$4,000,000 Euclid High School, Cleveland, which will open in September. Mr. Owens had been principal of Euclid Central High School in Cleveland.

Jessie M. Brewer, principal of Longfellow School, Pontiac, Mich., for 20 years, is retiring.

William F. Jack, assistant high school principal at Niagara Falls, N.Y., has been named principal.

Ruth McShane, principal of Colton School, New Orleans, has been appointed principal of Wright High School in the same city. She succeeded **Hazel Drysdale**, who has retired.

IN THE COLLEGES...

Margaret Clapp, assistant professor of history at Brooklyn College, New York City, has been named the eighth president of Wellesley College, Wellesley, Mass. Dr. Clapp won the Pulitzer biography prize in 1948 for "Forgotten First Citizen: John Bigelow," written as a thesis for the Ph.D. degree she received from Columbia University in 1946. She succeeds Mrs. Mildred McAfee Horton.

Paul A. Wagner, an executive of Bell & Howell Co., Chicago, has been elected president of Rollins College at Winter Park, Fla. Mr. Wagner, 31, may be the nation's youngest college president when he takes over his new position about August 1.

Samuel S. George, dean of the University of Dubuque, Dubuque, Iowa, has resigned to become president of Jamestown College at Jamestown, N.D.

Dr. Clarence Fielstra, associate professor of education at the University of California at Los Angeles, has been named assistant dean of the school of education. More than 2000 students are currently enrolled in education courses at U.C.L.A., approximately 14 per cent of the total number enrolled at the institution.

Dr. J. C. Warner has been named president-elect of Carnegie Institute of Technology. **President Robert E. Doherty** will continue in office until the end of the next academic year. Dr. Warner, assistant director of the college of engineering and science at Carnegie Tech, was away from the campus for two years, 1943 to 1945, coordinating research on the purification of plutonium, a vital part of the development of the atomic bomb.

A. J. Cloud, president of the City College of San Francisco, is retiring.

John J. Theobald, dean of administration at the City College of New York, became president of Queens College, New York City, July 1.

James E. Walter, a member of the national staff of the Congregational Christian Church, has been elected president of Piedmont College, Demorest, Ga.

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ALSO: "The Co-ordinated Classroom," by Darell Boyd Harmon. Illustrated booklet covering all phases of the subject: posture, lighting and decoration—special emphasis on processes of growth and development in the school child. Copy on request.

NEWS...

OTHERS...



K. S. Clem

Kenneth S. Clem, superintendent of schools at Douglas, Alaska, has been appointed secondary education supervisor for the territory of Alaska. Mr. Clem, a former Ohio schoolman, interrupted his Alaskan service begun in 1935 for graduate study at Greensboro,

N.C., teaching during that year at Anderson High School, Caswell County, North Carolina. He returned to Alaska last year.

Berthold Lowenfeld, former director of education research for the American Foundation for the Blind and lecturer in special education at Columbia University, is the new superintendent of the California School for the Blind at Berkeley. Dr. Lowenfeld is an Austrian by birth and education but became an American citizen in 1944.

Ray O. Duncan of the Illinois state department has been elected president of the Society of State Directors of Health, Physical Education, and Recreation. **Julian W. Smith** of the Michigan State Department of Public Instruction was named president-elect as well as vice president-elect for recreation.



R. O. Duncan

T. T. Hamilton Jr., formerly principal of New Hanover High School and president of Wilmington College, Wilmington, N.C., now is director of secondary education for Virginia. He succeeded the late Fred M. Alexander.

Dr. George V. Hall, director of education for the Naval Government of Guam, has been appointed director of research for the city schools of San Diego, Calif. **Dr. Robert E. Jenkins**, whom he succeeds, has been assigned to the post of assistant superintendent in charge of instruction. Three directors of instruction in San Diego have been moved up to assistant superintendents' posts in their respective fields: **Martha T. Farnum**, elementary schools; **T. Malcolm Brown**, secondary schools, and **J. Graham Sullivan**, adult and vocational education.

DEATHS...

Floyd A. Potter, 53, superintendent of schools at Atlantic City, N.J., since 1946, died after a long illness. From 1941 to 1946, Mr. Potter was superintendent of Atlantic County public schools.

Wallace A. Mannheimer, 62, principal of Long Island City High School, Queens, N.Y., died of a cerebral hemorrhage. Dr. Mannheimer was regarded as an authority on public health and sanitation.

Dr. William J. Barry, assistant superintendent of Boston public schools, died suddenly in his forty-sixth year. The cause was cerebral hemorrhage.

Thomas A. Tierney, principal of Technical High School, Scranton, Pa., died June 18 following surgery. On Tuesday, June 7, announcement was made over the high school's public address system that Mr. Tierney's condition was critical and that he was in need of blood transfusions. It is said that every one of the 1200 students and all of the teachers tried to get into the school office to volunteer blood donations.



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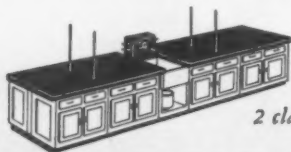
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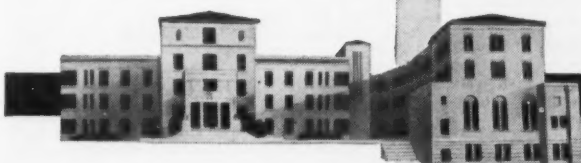


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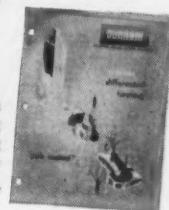
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THE BOOK SHELF

ADMINISTRATION

Are These Our Schools? Bulletin of the Association for Childhood International, 1200 15th St., N.W., Washington 5, D.C. Survey of conditions in the schools that handicap good teaching and how handicaps are being overcome. Pp. 36. 75 cents.

Statistics of State School Systems 1945-46. By David T. Blose, associate specialist in educational statistics. Biennial survey of education in the United States, 1944-46, Chapter II, U.S. Office of Education. Order from U.S. Government Printing Office, Washington 25, D.C. 25 cents.

1948-49 Education Directory. Part IV: Education Associations and Directories. Prepared by U.S. Office of Education. Pp. 57. Order from U.S. Government Printing Office, Washington 25, D.C. 15 cents.

ANNUAL REPORTS

Annual Report of the School Department of the City of Brockton, Massachusetts, for 1948. Edwin A. Nelson, supt. Pp. 39.

AUDIO-VISUAL

How to Organize and Conduct Community Film Workshops. By Louis Goodman, formerly supervisor of the Audio-Visual Center at City College of New York. Pp. 13. **How to Conduct a Survey of Community Film Needs and Resources.** By Rex M. Johnson, director of research, Council of Social Agencies, and Glen Burch, executive director, Film Council of America. Pp. 20. **How to Evaluate Films for Community Use.** By Robertson Sillars of the Institute of Adult Education, Teachers College, Columbia University. Pp. 15. **How to Organize a Film Festival.** By Virginia Beard, curator of films, Cleveland public library, and H. R. Nissley, Cleveland Film Council. Pp. 16. Film

Council of America, 6 W. Ontario St., Chicago 10. 15 cents each.

Radio and Television Bibliography. Prepared by Gertrude G. Broderick, radio education specialist. Bulletin 1948 No. 17, U.S. Office of Education. Pp. 33. Order from U.S. Government Printing Office, Washington 25, D.C. 15 cents.

CURRICULUM

New Directions in Science Teaching. By Anita D. Laton, professor of health and hygiene, San Jose State College, San Jose, Calif., and S. Ralph Powers, professor of natural sciences, Teachers College, Columbia University. McGraw-Hill Book Co., New York. Pp. 164. \$2.50.

Reading in Modern Education. By Paul Witty, professor of education, Northwestern University. D. C. Heath and Co., Boston. Pp. 319. \$3.50.

Educating for Citizenship. Pennsylvania State Department of Public Instruction, Harrisburg. Bulletin 242, 1949. Pp. 343.

America in the World. Textbook for junior high school grades treating of the relation of American history to world history in the period from 1776 to the present. By Marion Lansing. D. C. Heath and Co., New York. Pp. 704. \$2.96.

North Dakota Elementary Course of Study for Rural and Graded Schools. Prepared by the Department of Public Instruction, Bismarck, and cooperating educators. Garfield B. Nordrum, state supt. Pp. 327.

PERSONNEL

Are We Ready for 'Em? A survey of the demand for elementary teachers, 1949-1953, made by the College of Education, University of Texas. Pp. 14.

PUBLIC RELATIONS

Know Your High Schools. A bulletin for elementary and junior high school graduates and their parents. Published by the New York

City Board of Education, 110 Livingston St., Brooklyn 2. Pp. 26.

And Now to School. For parents of children entering kindergarten. Prepared under the direction of the Educational Service Bureau, School of Education, University of Pennsylvania, for the Suburban School Study Council, Philadelphia. Brief, simple text; many pictures. Pp. 30. 50 cents.

How to Reach Your Public. A handbook for the publicity chairman. By Aileen Pelletier Winkopp, director of public relations, Barnard College, Columbia University. Pp. 33. Order from Winkopp Associates, Box 237, Closter, N.J. \$1.

SCHOOL PLANT

A Study of Public School Building Needs in Springfield, Ill. (Mimeographed.) By John H. Herrick, E. B. Sessions and T. C. Holy. Bureau of Educational Research, Ohio State University. Pp. 96.

School Buildings, Grounds and Equipment for Elementary Schools in Small School Systems. Report of a committee; Ernest E. Stonecipher, director of rural education and extension, Kansas State Teachers College, chairman. Kansas State Teachers College Bulletin, Vol. 44, No. 7. Pp. 68.

SURVEYS

Wilmington Surveys Its Educational Program. (Mimeographed.) Report of the planning self-survey of the public schools, Wilmington, Del. Pp. 79.

That We May Grow. (Mimeographed.) Report of the educational program committee of the planning self-survey of the public schools, Wilmington, Del. Pp. 91.

The Principal Surveys His Job. Prepared by the principals of the public schools, Wilmington, Del. Discusses the principal as a community leader, a professional leader and an executive. Illustrated. Pp. 22.

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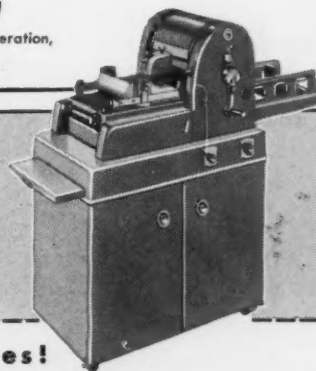
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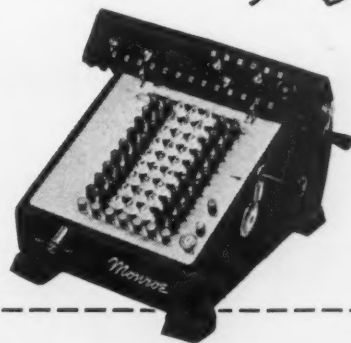
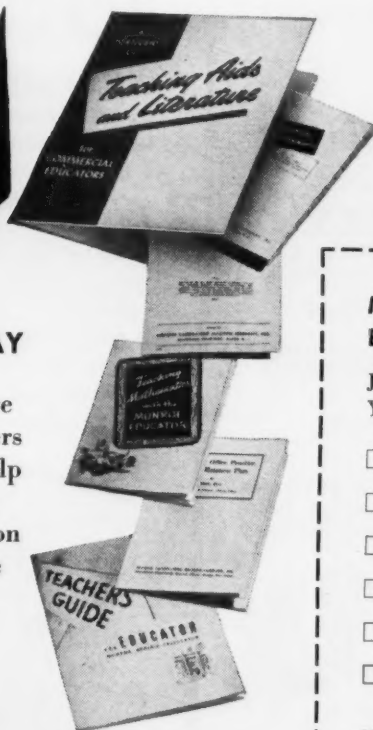
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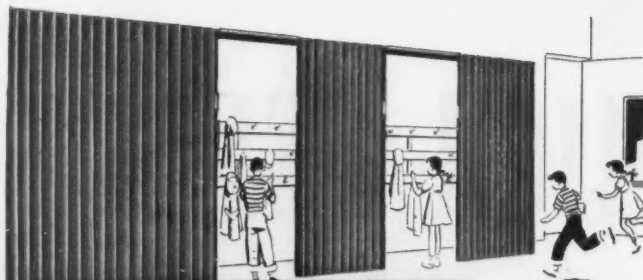
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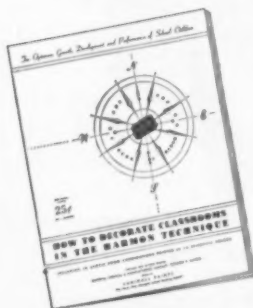
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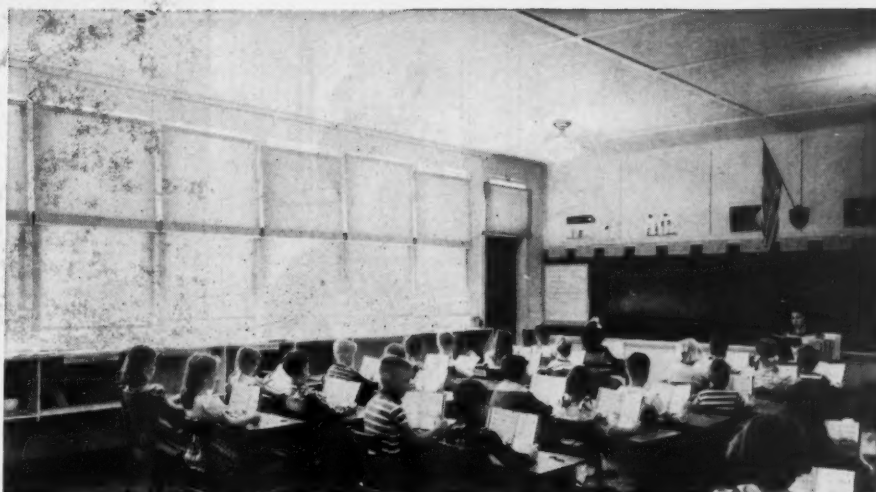


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Exterior view, Cragmont School, showing new Insulux No. 352 panel. Architect: Miller & Warnecke, Oakland, Calif.

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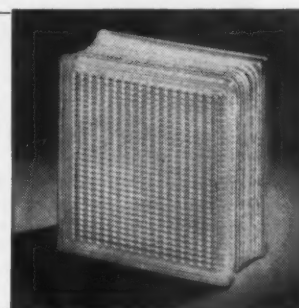
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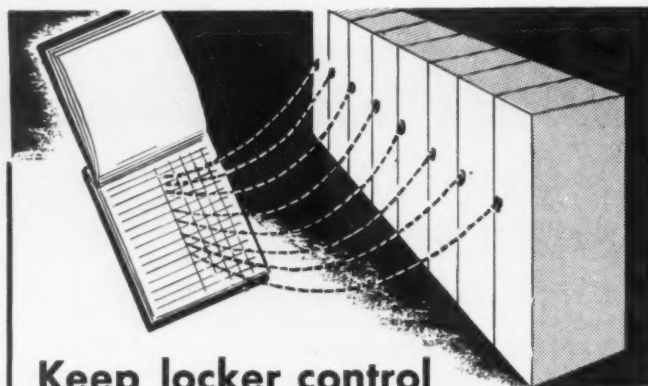
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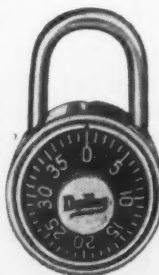
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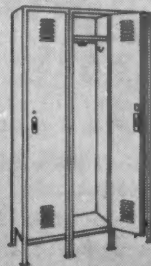
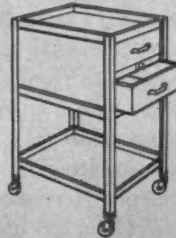
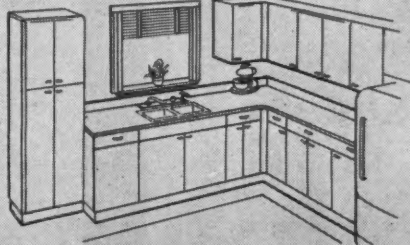
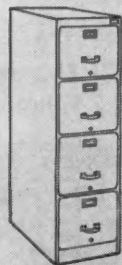
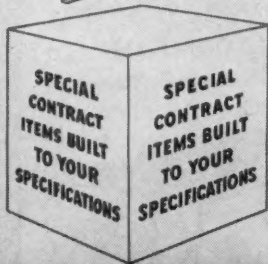
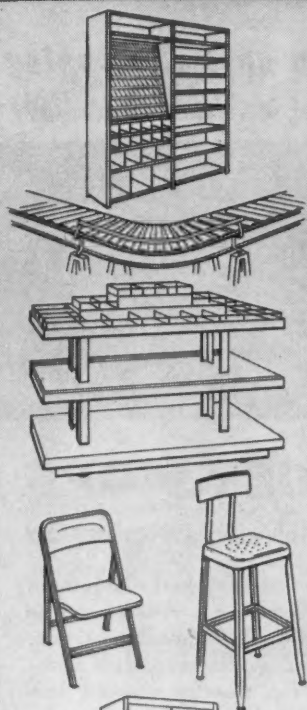
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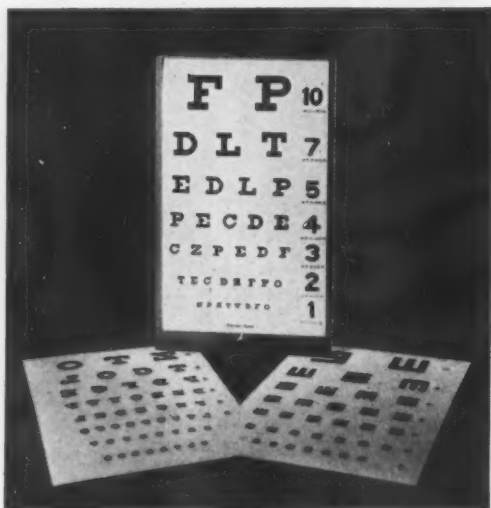


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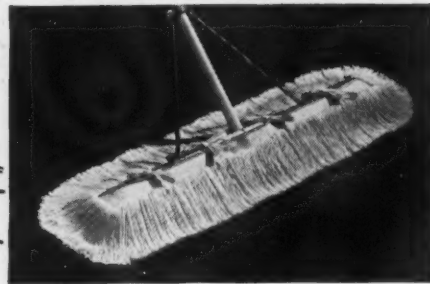
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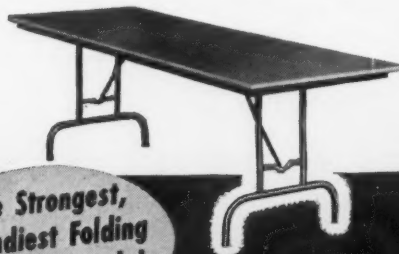
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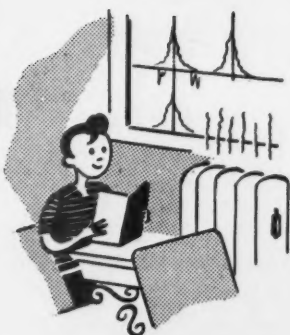
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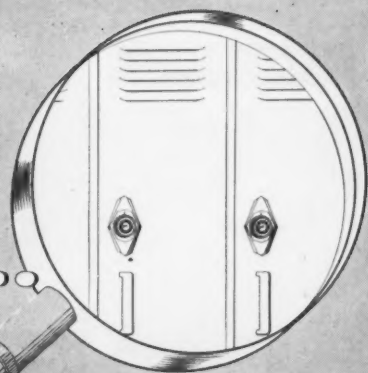


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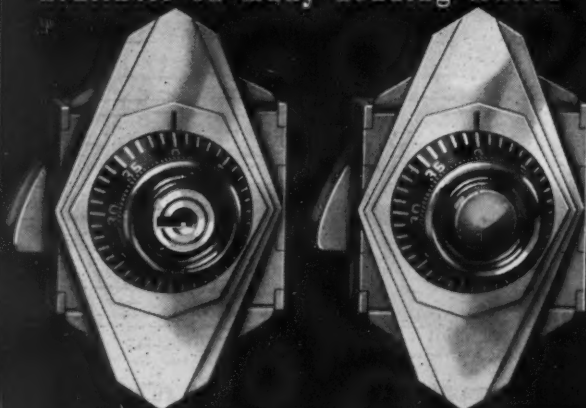
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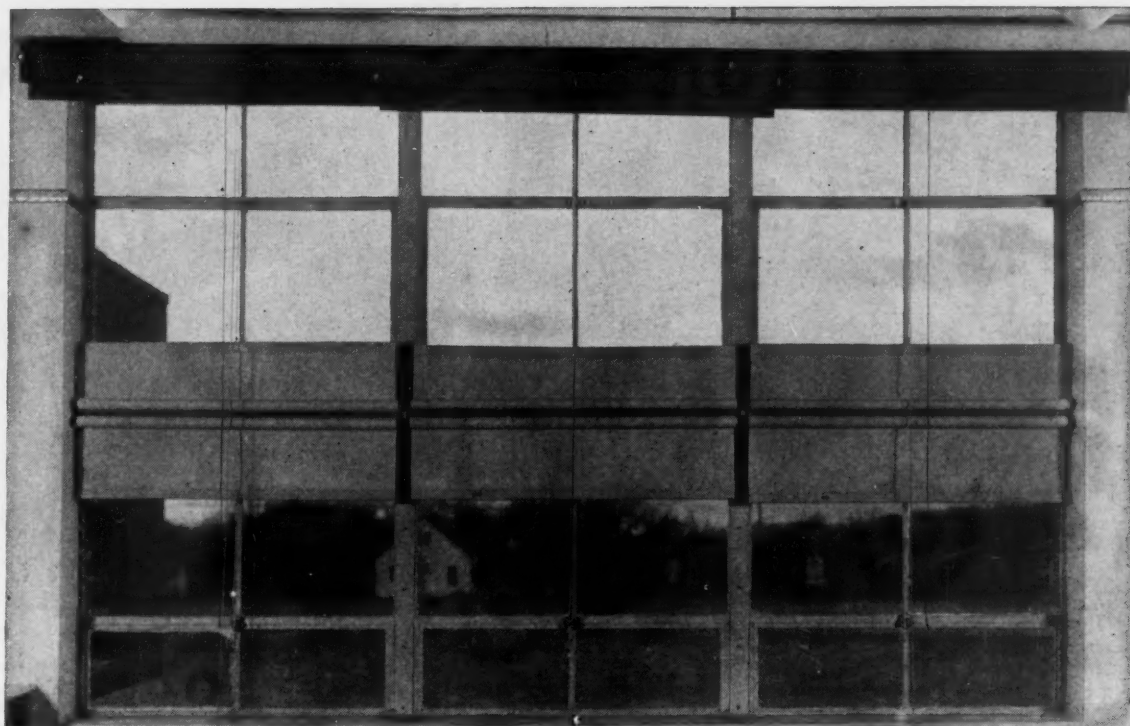


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Also Manufacturers of Speedball Pens and Products—Hunt Pens



—and at low cost. Scientific 100% useful disc of top-quality, cross-stranded steel fibers . . . Brillo Floor Pads quickly scour, clean, harden, and polish wax on all floor materials. Four grades in all sizes . . . give perfect results on all jobs. Sizes for all machines.

Brillo Mfg. Co., Inc., Bklyn. 1, N. Y.

Send for helpful folder on low-cost floor upkeep

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BRILLO
SOLID-DISC STEEL WOOL
FLOOR PADS

ACCURATE SCORING FOR THIS FOOTBALL SEASON

ALL
ELECTRIC

FINGER TIP
CONTROL

HOME
DOWN



VIS
TO-GO

- Scoring numbers two feet high, formed by 1 inch bull's eyes.
- Score, time, and quarters controlled from timer's table.
- Downs-Yards to go operated from line of scrimmage.
- All mechanisms enclosed in weather proof cabinets. Heavy duty reversible motor mounted in clock. Black minute hand and red second hand.

We Build Scoreboards to Your Specifications.
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WEBSTER CITY, IOWA

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FOLDING TABLE
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Prompt delivery on all models

CHECK MIDWEST FEATURES BEFORE YOU BUY! IT'S THE BETTER FOLDING TABLE FOR THE SAME PRICE!

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Litesite
chalkboard

*W.C. TRADE MARK

Here's LITESITE—the soft and textured green chalkboard that's color-designed to bring beauty and refreshing brightness to your classrooms. It's smooth to write on—easy to erase.

Write for Litesite Folder: Dept. NS-H9.

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Boontonware



TOUGH..

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QUIET..

**STAYS BRIGHT
WHEN
WASHED RIGHT**



Nine lives and many more are easy claims for Boontonware. That's because it's molded of MELMAC* by top-flight custom molders, at just the right weight for lasting durability.

Sleek, to be sure. Smooth, lustrous and available in four permanent pastel colors: BLUE, GREEN, YELLOW and BUFF. So quiet to use; a wonderful change for crowded eating rooms and busy kitchens.

Stays bright when washed with recommended detergents.

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Hotel, Restaurant
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It lasts and lasts and lasts

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THE

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BLAKESLEE
FOOD AND MEAT CHOPPER



**...meets the
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demand
for a
Single Unit
CHOPPER**



All models available
in either Duco Finish
or Gleaming Stainless-
Steel Construction.

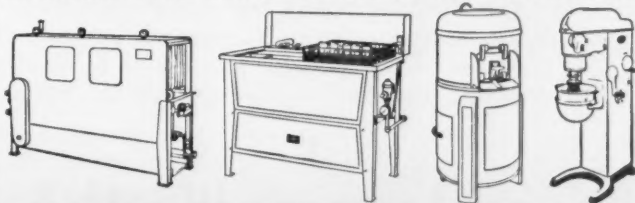
Blakeslee Food and Meat Choppers have been especially designed for hotels, restaurants and institutions where a separate unit is desired.

QUICK CUTTING ACTION RETAINS FLAVOR GIVING JUICES
This new chopper makes a clean cut without crushing or mashing the meat. All natural color and flavor is retained.

Built for long service—the Vee belt principle on the first speed reduction provides extra safety under severe overload such as bones blocking the knives. Smooth, streamlined design eliminates all dirt catching cracks and corners. Three sizes are available to grind from 8 to 30 pounds per minute.

ATTACHMENTS SPEED UP OTHER FOOD PREPARATION
A slicer attachment is available with slicer, shredder, julienne and grater plates. This greatly increases the utility value of this New Blakeslee-Built Chopper.

A COMPLETE LINE OF KITCHEN MACHINES



Since 1880

**BLAKESLEE
BUILT
KITCHEN MACHINES**

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DISHWASHERS • GLASSWASHERS • PEELERS • MIXERS • CHOPPERS

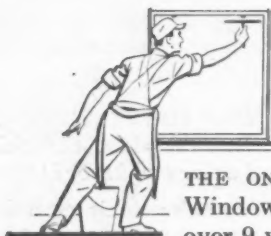
G. S. BLAKESLEE & CO. 1844 SO. 52nd AVE. CHICAGO 50, ILL.
NEW YORK TORONTO



City Hall,
Rock Island, Illinois

for more than 9 years...

**ONLY THE WINDOW WASHER
HAS HAD TO TOUCH THESE WINDOWS!**

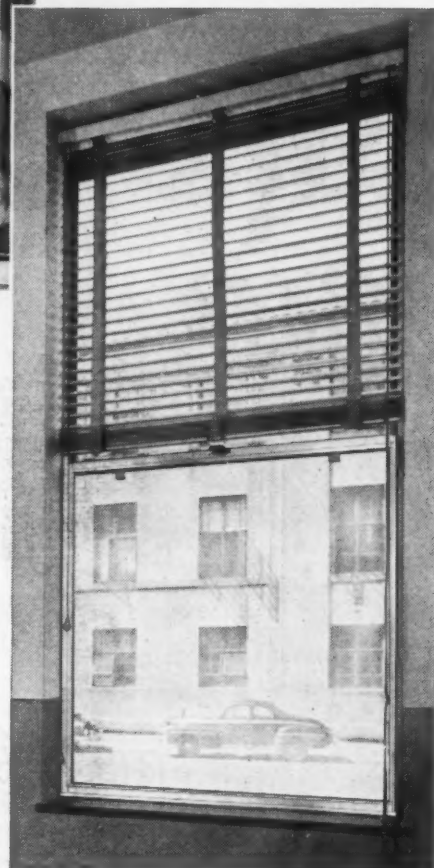


THE ONLY MAINTENANCE these Adlake Aluminum Windows have required since they were installed—over 9 years ago—is routine washing! Ultimately, by eliminating all maintenance costs, they will pay for themselves. *And they will last as long as the building!*

ONLY ADLAKE WINDOWS have the combination of woven-pile weather stripping and patented serrated guides that assures minimum air infiltration and absolute finger-tip control.

Adlake Windows never warp, rot, rattle, stick or swell. They retain their good looks and easy operation for the life of the building.

FOR THE WHOLE STORY on how Adlake Aluminum Windows wipe out maintenance costs during a lifetime of worry-free operation, drop us a post card today. Address The Adams & Westlake Company, 1104 North Michigan Avenue, Elkhart, Indiana. No obligation, of course.



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ALUMINUM WINDOWS

have these "plus" features:

- Minimum Air Infiltration
- Finger-tip Control
- No Warp, Rot, Rattle, Stick
- No Painting or Maintenance
- Ease of Installation

THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago



What's New FOR SCHOOLS

AUGUST 1949

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 100. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Art Studio Work Shop Furniture



Because of the rapid advances made in art education during the past few years, E. H. Sheldon & Company consulted with a large number of city, county and state art supervisors before developing its new line of Art Studio Work Shop Furniture which is now available. Designed to meet the new requirements, the line is attractive in appearance, functional and durable. It includes all types of equipment needed for a complete art work shop including storage and display cases, tables, benches, shelves, easels and horses, desks and other items. Typical of the modern design is the all-purpose art table illustrated.

The new line of art furniture is made of carefully selected materials, strongly constructed for stability and hard use with a high quality of finish. All units have been designed to fit the modern need in art education of diversification and flexibility and thus most of the equipment is movable, allowing for re-planning and redesigning of the art room to meet a wide variety of demands. Facilities for display and storage are also taken into consideration in the new line. E. H. Sheldon & Co., Dept. NS, Muskegon, Mich. (Key No. 288)

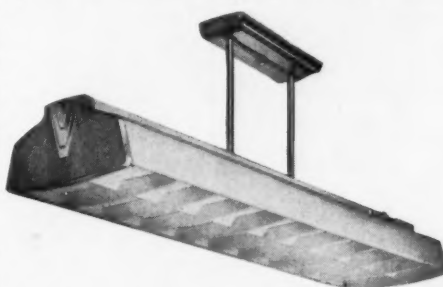
Bookkeeping Charts

A set of six new visual aid bookkeeping charts, printed in three colors, has been announced for school use. These large scale classroom charts were edited by South-Western Publishing Company for use with its 20th Century Bookkeeping and Accounting text but they may be used with any bookkeeping textbook. They are designed for easy reading from classroom distance and show practical entries on standard rule forms, greatly enlarged. The six charts cover the complete bookkeeping cycle

and are available in different mounting styles, ready for instant use. The George F. Cram Company, Inc., Dept. NS, 730 E. Washington St., Indianapolis 7, Ind. (Key No. 289)

Schoolite Fluorescent Fixture

The new Kayline "Schoolite" fluorescent fixture is constructed completely of metal to eliminate the danger of injury through breakage of glass panels. It is designed for high efficiency light output of 86.5 per cent and the V-channel louver construction gives 25 degree horizontal cutoff without high light-dark contrast. Hinged louver and side panels make servicing fast and easy. The



Schoolite is available in two 100 watt and Slimline styles and is designed for single or in-line mounting. Kayline Company, Dept. NS, 2480 E. 22nd St., Cleveland 15, Ohio. (Key No. 290)

Fairchild Tape Recorder

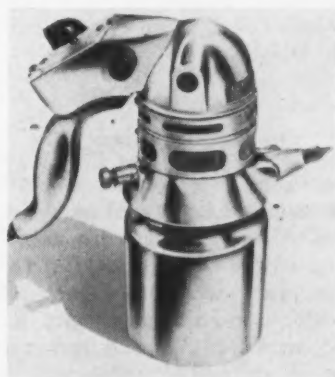
The Fairchild Tape Recorder is designed for high fidelity recording of any type of material with 15 inches per second tape speed, thereby increasing the recording time for any specific amount of tape and reducing the operating speed of the equipment. Lower costs of operation and better control of starting, stopping and editing are thus possible. Features of the instrument include plug-in type construction for uninterrupted service; interlock system to prevent accidental erasing; volume indicator for reading recording level; adjustment of playback head during operation, and automatic control in event of tape break. Fairchild Recording Equipment Corp., Dept. NS, 88-06 Van Wyck Blvd., Jamaica 1, N.Y. (Key No. 291)

Yardage Line Markers

New rubber football yardage line markers, combining safety with long-range visibility, have recently been announced by Voit. Made of long wearing black rubber with washable white fabric numerals molded into the face, the markers are practical and serviceable. Handy carrying grips are built-in for easy handling and the markers have no metal, no sharp corners, and will bend or collapse under weight, thus avoiding the possibility of injury to players. They lie flat for storage and are easily assembled and disassembled. A standard set consists of two sides but the design and a rubber hinge coupling principle permit three or four sided assembly if desired. W. J. Voit Rubber Corp., Dept. NS, 1600 E. 25th St., Los Angeles 11, Calif. (Key No. 292)

Insecticide Sprayer

The new West Mistorizer is an insecticide sprayer designed to provide efficient insect control. The new model automatically sprays insecticides faster and farther than previous models. It requires no filters, oiling or greasing, is leakproof, has hermetically sealed ball bearings and operates on AC or DC. The unit runs wet or dry and permits instant, continuous full pressure spraying. The low center of gravity makes the new sprayer easier to handle and minimizes the possibility of tipping.



West Disinfecting Co., Dept. NS, 42-16 West St., Long Island City 1, N.Y. (Key No. 293)

Portable Automatic Phonograph



The new Knight 45 r.p.m. automatic changer electric phonograph is designed for use with the new 7 inch 45 r.p.m. records. The new type changer is positive-acting and has a minimum of moving parts. Records are changed in less than 2 seconds. The only controls are a combination on-off switch and volume control, tone control and start-reject button. The built-in amplifier and baffled dynamic speaker are designed for rich tone quality and ample power. The unit is attractively housed in a compact, portable case covered in brown rawhide fabric. Space is allowed for carrying records and the unit weighs only 12½ pounds. **Allied Radio Corp., Dept. NS, 833 W. Jackson, Chicago 7. (Key No. 294)**

Machine Dishwashing Compound

The formula of Wyandotte Keego, the compound for machine dishwashing, has been improved to increase its capacity for washing in water containing hardness due to calcium or magnesium salts. The desirable properties of the original formula—mildness to silverware, protective action on interior fittings of machines, high suspending power for food residues, free rinsing and the ability to remove many types of stains from chinaware—have all been retained, thus making the product especially effective for machine dishwashing. **Wyandotte Chemicals Corp., Dept. NS, Wyandotte, Mich. (Key No. 295)**

Tube Cutter

The maintenance department will be interested in the new tube cutter recently announced with "free wheeling" ball-bearing action which is designed for use with copper, brass, aluminum, Bundy steel, block tin and lead tubing. It will cut all sizes from ⅛ to 1 inch outside diameter, inclusive. A retractable locking reamer for reaming tubing after it is cut is a feature of the cutter which has an overall length of only 4½ inches. The reamer folds out of the way when not

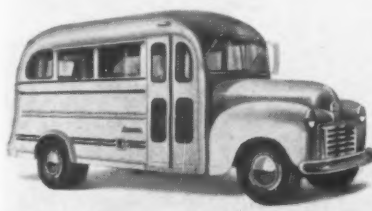
in use and the tool weighs only 6 ounces and is known as No. 274-F. **The Imperial Brass Mfg. Co., Dept. NS, 1200 W. Harrison St., Chicago 7. (Key No. 296)**

Chalkboard Coating

A new paint for converting blackboards to the new green chalkboards has recently been announced. Known as Vismatic Green Chalkboard Coating, the new product can be applied over black slateboards in old buildings or directly on smooth plaster to provide a smooth writing surface in new schools. The paint is easily applied with brush or spray gun and hardens in 48 hours to a dark green color which is lightened several shades after a few days of use. White chalk is used on this new Glidden coating. **The Glidden Company, Dept. NS, 11001 Madison Ave., Cleveland 2, Ohio. (Key No. 297)**

Small Model Bus

A new small model school bus, designed to accommodate 16 to 20 passen-



gers comfortably, has recently been introduced by the Carpenter Body Works. All of the engineering and safety features of the standard Carpenter bus are incorporated in the new model which differs from their regular school coach in size only.

The new small size body can be mounted on one ton chassis with single or dual wheels. The new bus is designed for use on runs through narrow winding roads and where the number of pupils does not exceed 20. **The Carpenter Body Works, Dept. NS, Mitchell, Ind. (Key No. 298)**

Automatic Timer

A new automatic timing device is now available as optional equipment on all Jackson dishwashers. With the new timer the operator needs only to push a button and the dishwasher automatically goes through the wash and rinse cycle, then shuts itself off, thus ensuring the correct amount of time for proper washing, rinsing and sanitizing operations. **The Jackson Dishwasher Co., Dept. NS, 3703 E. 93rd St., Cleveland 5, Ohio. (Key No. 299)**

All-Purpose Washer

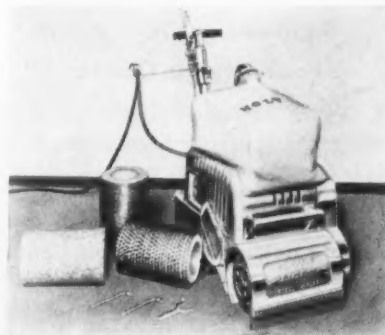
The Southern Cross all-purpose washer was designed, after years of research, to provide a low priced, speedy and efficient washer that could be mounted anywhere and that would wash any piece of kitchen equipment or utensil. Powered by a sealed ¼ h.p. ball-bearing motor, the power mechanism, switches and automatic safety devices are enclosed in a stainless steel carrying case. Washing is performed by a series of brushes specially designed for each washing job. The brushes may be rapidly changed and range from special bronze wire Fuller-grips for burned or tarnished pots and pans, to tough fiber for normal pot washing and nylon bristle brushes for glassware, chinaware and plastic.

The washer is portable, may be wall or ceiling mounted, is instantly detachable and may be placed on any table top. All exposed parts are of stainless steel and all moving parts are permanently sealed. A special attachment that fits any sink washes glassware, cups, bowls and individual tea or coffee pots efficiently in a minimum of time. **Southern Cross Mfg. Corp., Dept. NS, 915 Eye St., N. W., Washington 1, D. C. (Key No. 300)**

Holt All-Purpose Machine

The Holt Tandem Motored All Purpose 12 Steel Wooling Machine is a dual motored machine designed to work fast and to do a steel wooling, cleaning, sweeping, polishing, scrubbing, scaling or degreasing job on any type of floor. Attachments for these uses are quickly and easily interchangeable. The steel wooler is designed for use on wood floors and also to take stains off marble, terrazzo and other stone and mineral floors.

The new machine is modern in design and in operating procedure. The Holt Automatic Belt Tightener, High Suction Vacuum and other Holt design and construction features are incorporated in the new machine. It is built for long, dependable, trouble-free operation under



rugged operating conditions. **Holt Mfg. Co., Dept. NS, 651-20th St., Oakland 12, Calif. (Key No. 301)**

Fanfold Writing Machine

A new electric keyboard fanfold writing machine has been designed to produce more and better multi-copy work with less physical effort. It combines fully electric keyboard for speed and uniformity of type impressions with improved automatic features for simplified machine manifold printing operations.

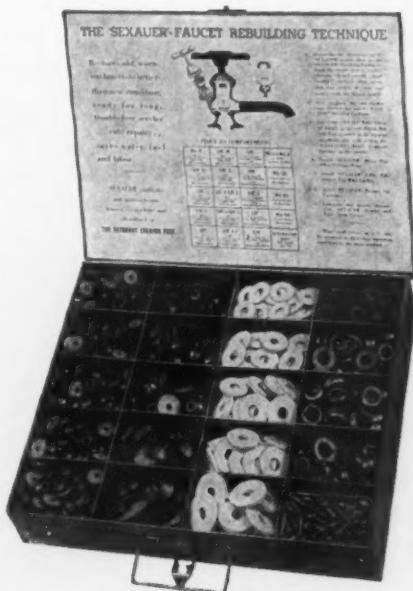
The new machine is equipped with an automatic electric carriage return and a 2 position intermediate carriage return feature. Designed for using continuous forms, there is also a transparent form cutting knife for unobstructed insertion of loose forms and the form measuring guide has been redesigned to facilitate removal of forms. The typewriter keyboard is standard, thus being adaptable for use by all typists. **Underwood Corporation, Dept. NS, 1 Park Ave., New York 16. (Key No. 302)**

Indirect Luminaire

The new Guth Seelux is an indirect luminaire of modern design for use with Silver Bowl Lamps. Louvers are of spun aluminum with a fine emery-grained finish permanently protected with the Alzak Aluminum process. The Silver Bowl Lamp used in the luminaire contains the major reflector and the fixture can be restored to initial efficiency merely by a lamp change. Open louvers facilitate maintenance. **The Edwin F. Guth Co., Dept. NS, 2615 Washington Ave., St. Louis 3, Mo. (Key No. 303)**

Faucet Rebuilding Unit

Permanent repair or rebuilding of faucets is now possible with the new

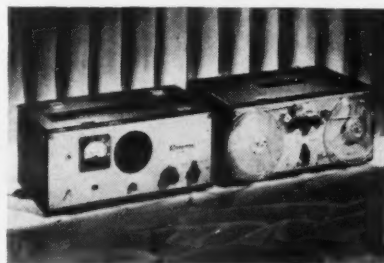


Sexauer No. 100 Giant "Handy Andy" assortment. Containing 1080 Sexauer parts, the assortment is housed in a

sturdy, compartmented, steel kit with locking cover and carrying handle for ease in transporting to place of need. Included in the assortment is a properly balanced stock of everything needed to rebuild any type faucet and many small valves. It saves time and effort in maintenance and makes it possible to do a complete job instead of making a temporary repair. **J. A. Sexauer Mfg. Co., Inc., Dept. NS, 2503 Third Ave., New York 51. (Key No. 304)**

Tape Recorder

High quality reproduction is a feature of the new model tape recorder recently developed by Magnecord Inc. especially for school and industrial use. Known as the PT6-JA, the new model conforms to the specifications set forth by the National Association of Broadcasters as their standard for the broadcasting industry. The mechanical unit features high speed forward and rewind, two

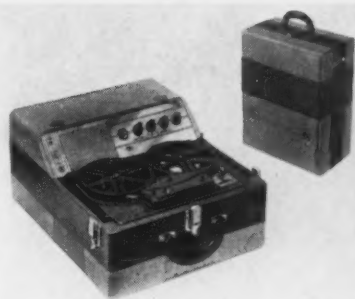


tape speeds, one for reproduction of music and voice and a faster speed for the best reproduction covering the complete range of human hearing, and simplicity of operation and control. The mechanical unit and amplifier are in separate carrying cases to facilitate handling by teacher or student. **Magnecord, Inc., Dept. NS, 360 N. Michigan Ave., Chicago 1. (Key No. 305)**

Transcription Player

A new 16 inch Transcription Record Player recently developed has dual speed, $33\frac{1}{3}$ or 78 r.p.m., and plays all records from 6 to 16 inches in size. Motor speed can also be varied from 70 to 82 r.p.m. on standard setting, with equivalent variation on the slower speed. A microphone input is provided and a model M1 microphone with stand is available as optional equipment. Separate volume controls permit mixing both music and voice or quick changing from one to the other. Tone control gives frequency response from 50 to 12,000 cycles. Dual speakers combine to give good tone response. The unit is housed in a sturdy, compact carrying case and is easy to handle and simple to set up and use. **Western Sound and Electric Laboratories, Inc., Dept. NS, 805 S. Fifth St., Milwaukee 4, Wis. (Key No. 306)**

Magnetic Ribbon Recorder



The new portable Model BK-414 "Soundmirror" Magnetic Ribbon Recorder is designed to record and reproduce high fidelity recordings easily and simply with lifelike fidelity, quality and exactness. Recordings are made through the microphone or directly from a radio or record-player and played back through the compact amplifier unit. The new model enables teachers or pupil assistants to make recordings of all types with professional quality after a minimum of operating experience.

Simplicity of operation and threading make the unit easy to handle and it features a new simplified single control for ribbon movement with automatic rewind. Thirty-minute recording reels are small in size and easy to handle and store. Reels may be reused for unlimited successive recordings as previous recordings are automatically erased when a new recording is made. Input and output jacks enable the operator to play the "Soundmirror" through an external or auxiliary speaker, a public address system, an external amplifier and speaker system or a radio amplifier. The unit can serve as an integral part of the school public address system and is easily portable for use where needed. The BK-414 is approved by the Underwriters Laboratory. **The Brush Development Co., Dept. NS, 3405 Perkins Ave., Cleveland 14, Ohio. (Key No. 307)**

Wood Floor Finish

A solvent-type non-slip floor polish especially formulated for wood floors has been developed to permit hardwood floors and gymnasium floors to be polished to a high sheen without being slippery and with high resistance to scuffing and traffic wear. Known as Trafo, the polish has special ingredients in the formula which loosen dirt so floors can be cleaned and repolished in one operation.

Buffing gives the finish an attractive sheen which is more non-slip than before buffing and Trafo is designed to resist the tracking effect of heavy traffic and the skids and stops of fast play on gymnasium floors. **Walter G. Legge Company Inc., Dept. NS, 101 Park Ave., New York 17. (Key No. 308)**

Product Literature

• Everyone in the school system, whether administrator, department head, board member, teacher or maintenance man, will be interested in the new "School Buyer's Guide, Equipment and Supplies," Catalog No. 88 for the school year 1949-1950, recently issued by Beckley-Cardy Co., 1632 Indiana Ave., Chicago 16. Completely indexed, this comprehensive 192 page catalog gives descriptive information, illustrations and prices on school furniture of all kinds, office equipment and supplies, athletic equipment and supplies, chalkboards, maps, window shades, maintenance materials, classroom art objects, clocks, pencils, duplicators, paper, drawing instruments and supplies, workbooks, posters, books, magazines and many other items necessary for the efficient operation of the school system. (Key No. 309)

• Steel windows and doors complete with hardware, that are carried in stock by local dealers for quick delivery, are listed in a new 28 page catalog, "Fenestra Stock Products," recently issued by Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11, Mich. Installation details, typical applications and stock types and sizes are shown for storm windows and screens, Fenecraft projected windows and metal swing and slide doors and frames. (Key No. 310)

• **Bulletin No. 634B** illustrates and describes 36 different products—unit heaters, cabinet convectors, baseboard convectors, finned radiation, pumps and steam specialties—offered by C. A. Dunham Company, 400 W. Madison St., Chicago 6. This new 2 color, 12 page condensed version of the general products catalog of heating appliances developed by this company presents specifications, capacities and applications of all appliances listed. (Key No. 311)

• Equipment for recirculation, filtration, chlorination, softening and pH control of swimming pools is described in **Bulletin No. 2157, "Permutit Swimming Pool Equipment,"** issued by The Permutit Co., 330 W. 42nd St., New York 18. Manual and automatic valves are explained and the complete line of accessories, such as suction cleaners, heaters and test kits, is described. In addition to full specifications, the bulletin is illustrated with blue prints of equipment as well as photographs and cut-away drawings. (Key No. 312)

• The various types of Morse Boulger Destructors and Kernerators for handling all kinds of waste, garbage and refuse, with details as to capacities, sizes and dimensions are described in the new 8 page **Bulletin No. 174** issued by Morse Boulger Destructor Co., 205 E. 42nd St. New York 17. (Key No. 313)

• Two new Toro catalogs have recently been released. One on "**Toro Tractors and Mowers**" is a 24 page booklet with illustrations showing Toro tractors and gang mowers in action and giving complete specifications on these machines. The booklet on "**Toro Power Mowers**" is a 28 page catalog with full detailed information and illustrations of the complete Toro line of hand and power mowers including the rotary scythe, suction lift-mowers made by the Whirlwind Corporation, a Toro subsidiary. Copies of either or both of these catalogs are available from the Toro Mfg. Corp., Minneapolis 6, Minn. (Key No. 314)

• Those planning new institutions or the remodeling of showers, cafeterias, corridors, stairways or an entire building will find helpful information in the new **Marlite Sample Folder** issued by Marsh Wall Products, Inc., Dover, Ohio. Actual color samples of Marlite, the plastic-finished wall and ceiling panel, and swatches to indicate the many colors in which the product is available, are included in the folder. (Key No. 315)

• "**Basic Application Data**" is the title of a bulletin issued by the International Nickel Co., Inc., 67 Wall St., New York 5, to help architects, engineers and others concerned to prevent roof failures caused by unusual climatic conditions or atmospheric concentrations of smoke, fumes and other corrosives. Suggested gauges for principal exterior building applications of Monel roofing sheet, based on existing Monel installations, are listed in the folder which also gives fabricating and installation tips and information on the availability and relative cost of Monel roofing sheet. (Key No. 316)

• "**How to Organize a Community Film Information Center,**" written by Charlesanna Fox, Lawson McGhee Library, Knoxville, Tenn., is the fourth in the series of "How-to-do-it" pamphlets published by the Film Council of America, 6 W. Ontario St., Chicago 10. Selling at 15 cents per copy, the pamphlet describes in simple, concrete style how a film information center can be established in any community and outlines the services it can render. An 8 page "Film Reference Shelf" appended lists selected film catalogs, bibliographies, books, pamphlets and periodicals in the audio-visual field. (Key No. 317)

• Full information on "**The March of Time Forum Films**" is contained in a booklet recently issued by The March of Time Forum Films, 369 Lexington Ave., New York 17. Data on each film available are supplemented with information on how to order these 16 mm. sound films and convenient mailing cards are attached. The films are alphabetically indexed for quick reference. (Key No. 318)

• "**Designs for Visual Education**" is the title of a folder recently issued by Da-Lite Screen Co., Inc., 2711 N. Pulaski Rd., Chicago 39. The brochure is a reprint of an article of the same title and provides a picture portfolio of model classrooms designed to accommodate equipment required for audio-visual learning, as compared to the "standard" classroom recommended previously. (Key No. 319)

• A "**School Record**" book, designed by Clyde C. Corn, Superintendent of the Mt. Zion Community Schools, Mt. Zion, Ill., has been published by the Randolph School Supply Co., Champaign, Ill. The book is designed to furnish an easily prepared record of the minutes of board meetings and at the same time to be permanent. It is of loose-leaf design, attractively bound with a sturdy ledger binder, and the name of the school district purchasing the book will be embossed. It is so designed that the Secretary of the board need do little more than fill in blanks and when typewritten, it is a permanent record. The book sells for \$29 plus printed sheet costs. (Key No. 320)

Film Releases

"Once Upon A Time," 14 min., 16 mm. sound, on clock making. **British Information Services, 30 Rockefeller Plaza, New York 20.** (Key No. 321)

"Law and Social Controls," "Life in the Central Valley of California," "Writing Better Business Letters," "Attitudes and Health," "Choosing Your Occupation" and "Archery for Girls," all 1 reel, sound, color or black and white. **Coronet Films, Coronet Bldg., Chicago 1.** (Key No. 322)

"Animals Growing Up," 16 mm. 1 reel, sound. **Encyclopaedia Britannica Films Inc., Wilmette, Ill.** (Key No. 323)

"County Fair" and "Girls in White," 16 mm. educational films. **RKO Radio Pictures, Inc., 1270 Avenue of the Americas, New York 20.** (Key No. 324)

"It's Your Health," dental health educational film, 16 mm., 18 min., sound, black and white. **Southern California State Dental Assn., 903 Crenshaw Blvd., Los Angeles 6, Calif.** (Key No. 325)

Suppliers' News

Changes of address have been announced by the following companies:

Walter Maguire Co., Inc., from 330 W. 42nd St., New York 18, to 1000 N. Division St., Peekskill, N. Y.

Standard Scientific Supply Corp., from 34 W. Fourth St., New York 12, to 61 Cornelison Ave., Jersey City 4, N. J.

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AND ADVERTISEMENTS

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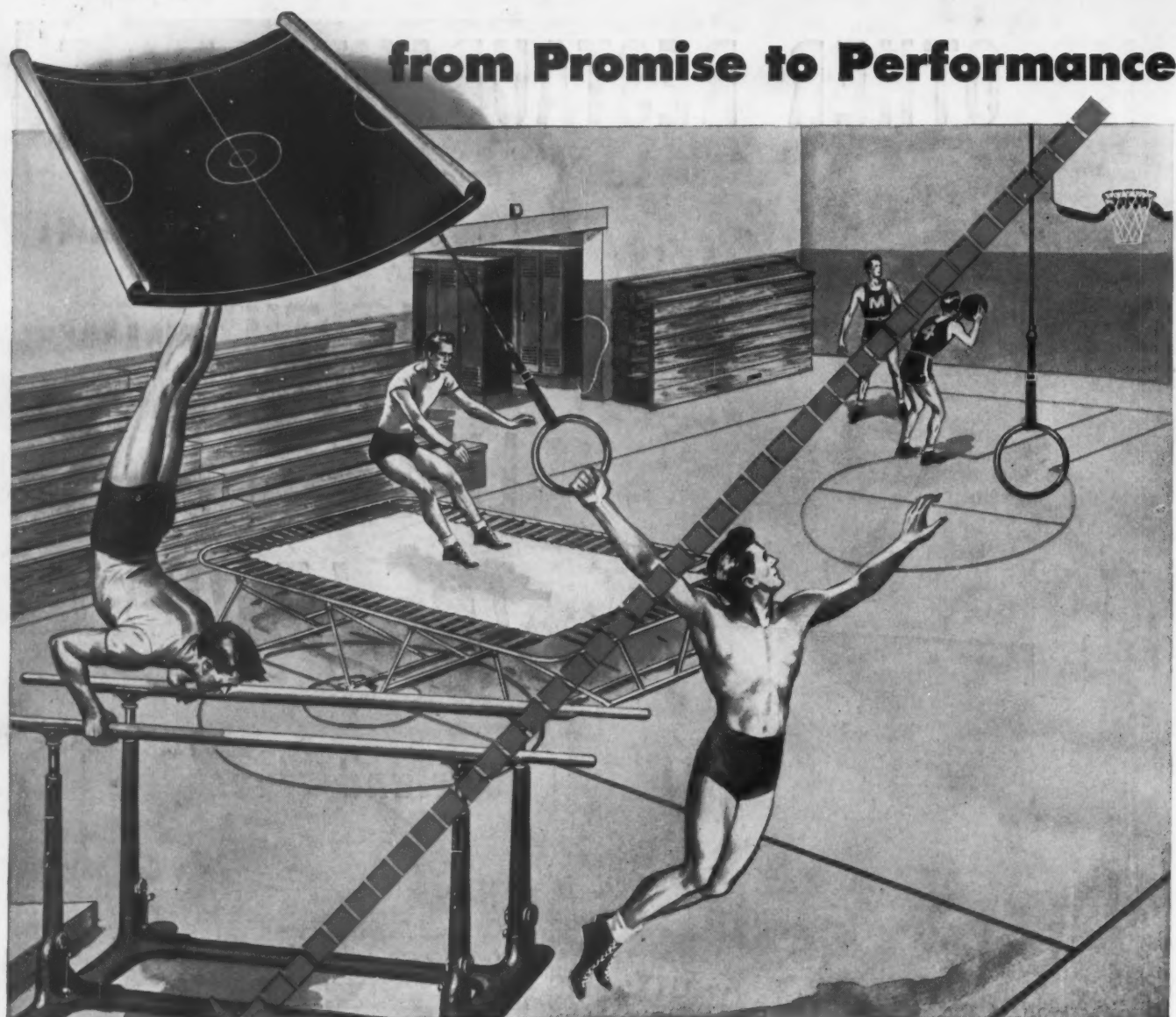
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